

SEQUENCE LISTING

<110> NatImmune A/S
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Kongerslev, Leif
Matthiesen, Finn

<120> Collectin-complement activating protein chimeras

<130> P 703 PC00

<160> 147

<170> PatentIn version 3.4

<210> 1

<211> 185

<212> PRT

<213> Mus musculus

<400> 1

Met Arg Leu Leu Ile Phe Leu Gly Leu Leu Trp Ser Leu Val Ala Thr
1 5 10 15

Leu Leu Gly Ser Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Val Ser
20 25 30

Pro Gly Phe Pro Glu Lys Tyr Ala Asp His Gln Asp Arg Ser Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser Tyr Arg Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Thr Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp
85 90 95

Thr Glu Gln Ala Pro Gly Asn Asp Thr Phe Tyr Ser Leu Gly Pro Ser
100 105 110

Leu Lys Val Thr Phe His Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Val Asp Glu Cys Arg Val
130 135 140

Ser Leu Gly Asp Ser Val Pro Cys Asp His Tyr Cys His Asn Tyr Leu
145 150 155 160

Gly Gly Tyr Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Gln Asn
165 170 175

Lys His Thr Cys Ser Glu Gln Ser Leu
180 185

<210> 2
<211> 244
<212> PRT
<213> Mus musculus

<400> 2

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 3
<211> 239
<212> PRT
<213> Mus musculus

<400> 3

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 4
<211> 652
<212> PRT
<213> Homo sapiens

<400> 4

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu

65					70					75					80
Arg	Arg	Glu	Ala	Ala	Leu	Thr	Ala	Arg	Met	Ser	Lys	Phe	Trp	Ile	Gly
				85					90					95	
Leu	Gln	Arg	Glu	Lys	Gly	Lys	Cys	Leu	Asp	Pro	Ser	Leu	Pro	Leu	Lys
			100					105					110		
Gly	Phe	Ser	Trp	Val	Gly	Gly	Gly	Glu	Asp	Thr	Pro	Tyr	Ser	Asn	Trp
		115					120					125			
His	Lys	Glu	Leu	Arg	Asn	Ser	Cys	Ile	Ser	Lys	Arg	Cys	Val	Ser	Leu
	130					135					140				
Leu	Leu	Asp	Leu	Ser	Gln	Pro	Leu	Leu	Pro	Ser	Arg	Leu	Pro	Lys	Trp
145					150					155					160
Ser	Glu	Gly	Pro	Cys	Gly	Ser	Pro	Gly	Ser	Pro	Gly	Ser	Asn	Ile	Glu
				165					170					175	
Gly	Phe	Val	Cys	Lys	Phe	Ser	Phe	Lys	Gly	Met	Cys	Arg	Pro	Leu	Ala
			180					185					190		
Leu	Gly	Gly	Pro	Gly	Gln	Val	Thr	Tyr	Thr	Thr	Pro	Phe	Gln	Thr	Thr
		195					200					205			
Ser	Ser	Ser	Leu	Glu	Ala	Val	Pro	Phe	Ala	Ser	Ala	Ala	Asn	Val	Ala
	210					215					220				
Cys	Gly	Glu	Gly	Asp	Lys	Asp	Glu	Thr	Gln	Ser	His	Tyr	Phe	Leu	Cys
225					230					235					240
Lys	Glu	Lys	Ala	Pro	Asp	Val	Phe	Asp	Trp	Gly	Ser	Ser	Gly	Pro	Leu
				245					250					255	
Cys	Val	Ser	Pro	Lys	Tyr	Gly	Cys	Asn	Phe	Asn	Asn	Gly	Gly	Cys	His
			260					265					270		
Gln	Asp	Cys	Phe	Glu	Gly	Gly	Asp	Gly	Ser	Phe	Leu	Cys	Gly	Cys	Arg
		275					280					285			
Pro	Gly	Phe	Arg	Leu	Leu	Asp	Asp	Leu	Val	Thr	Cys	Ala	Ser	Arg	Asn
	290					295					300				

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Pro Gly Val Trp

530

535

540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 5

<211> 644

<212> PRT

<213> Mus musculus

<400> 5

Met Ala Ile Ser Thr Gly Leu Phe Leu Leu Leu Gly Leu Leu Gly Gln
1 5 10 15

Pro Trp Ala Gly Ala Ala Ala Asp Ser Gln Ala Val Val Cys Glu Gly
20 25 30

Thr Ala Cys Tyr Thr Ala His Trp Gly Lys Leu Ser Ala Ala Glu Ala
35 40 45

Gln His Arg Cys Asn Glu Asn Gly Gly Asn Leu Ala Thr Val Lys Ser
50 55 60

Glu Glu Glu Ala Arg His Val Gln Gln Ala Leu Thr Gln Leu Leu Lys
65 70 75 80

Thr Lys Ala Pro Leu Glu Ala Lys Met Gly Lys Phe Trp Ile Gly Leu
85 90 95

Gln Arg Glu Lys Gly Asn Cys Thr Tyr His Asp Leu Pro Met Arg Gly
100 105 110

Phe Ser Trp Val Gly Gly Gly Glu Asp Thr Ala Tyr Ser Asn Trp Tyr
115 120 125

Lys Ala Ser Lys Ser Ser Cys Ile Phe Lys Arg Cys Val Ser Leu Ile
130 135 140

Leu Asp Leu Ser Leu Thr Pro His Pro Ser His Leu Pro Lys Trp His
145 150 155 160

Glu Ser Pro Cys Gly Thr Pro Glu Ala Pro Gly Asn Ser Ile Glu Gly
165 170 175

Phe Leu Cys Lys Phe Asn Phe Lys Gly Met Cys Arg Pro Leu Ala Leu
180 185 190

Gly Gly Pro Gly Arg Val Thr Tyr Thr Thr Pro Phe Gln Ala Thr Thr
195 200 205

Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Val Ala Asn Val Ala Cys
210 215 220

Gly Asp Glu Ala Lys Ser Glu Thr His Tyr Phe Leu Cys Asn Glu Lys
225 230 235 240

Thr Pro Gly Ile Phe His Trp Gly Ser Ser Gly Pro Leu Cys Val Ser
245 250 255

Pro Lys Phe Gly Cys Ser Phe Asn Asn Gly Gly Cys Gln Gln Asp Cys
260 265 270

Phe Glu Gly Gly Asp Gly Ser Phe Arg Cys Gly Cys Arg Pro Gly Phe
275 280 285

Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn Pro Cys Ser
290 295 300

Ser Asn Pro Cys Thr Gly Gly Gly Met Cys His Ser Val Pro Leu Ser
305 310 315 320

Glu Asn Tyr Thr Cys Arg Cys Pro Ser Gly Tyr Gln Leu Asp Ser Ser
325 330 335

Gln Val His Cys Val Asp Ile Asp Glu Cys Gln Asp Ser Pro Cys Ala
340 345 350

Gln Asp Cys Val Asn Thr Leu Gly Ser Phe His Cys Glu Cys Trp Val
355 360 365

Gly Tyr Gln Pro Ser Gly Pro Lys Glu Glu Ala Cys Glu Asp Val Asp
370 375 380

Glu Cys Ala Ala Ala Asn Ser Pro Cys Ala Gln Gly Cys Ile Asn Thr
385 390 395 400

Asp Gly Ser Phe Tyr Cys Ser Cys Lys Glu Gly Tyr Ile Val Ser Gly
405 410 415

Glu Asp Ser Thr Gln Cys Glu Asp Ile Asp Glu Cys Ser Asp Ala Arg
420 425 430

Gly Asn Pro Cys Asp Ser Leu Cys Phe Asn Thr Asp Gly Ser Phe Arg
435 440 445

Cys Gly Cys Pro Pro Gly Trp Glu Leu Ala Pro Asn Gly Val Phe Cys
450 455 460

Ser Arg Gly Thr Val Phe Ser Glu Leu Pro Ala Arg Pro Pro Gln Lys
465 470 475 480

Glu Asp Asn Asp Asp Arg Lys Glu Ser Thr Met Pro Pro Thr Glu Met
485 490 495

Pro Ser Ser Pro Ser Gly Ser Lys Asp Val Ser Asn Arg Ala Gln Thr
500 505 510

Thr Gly Leu Phe Val Gln Ser Asp Ile Pro Thr Ala Ser Val Pro Leu
515 520 525

Glu Ile Glu Ile Pro Ser Glu Val Ser Asp Val Trp Phe Glu Leu Gly
530 535 540

Thr Tyr Leu Pro Thr Thr Ser Gly His Ser Lys Pro Thr His Glu Asp
545 550 555 560

Ser Val Ser Ala His Ser Asp Thr Asp Gly Gln Asn Leu Leu Leu Phe
565 570 575

Tyr Ile Leu Gly Thr Val Val Ala Ile Ser Leu Leu Leu Val Leu Ala
580 585 590

Leu Gly Ile Leu Ile Tyr His Lys Arg Arg Ala Lys Lys Glu Glu Ile
595 600 605

Lys Glu Lys Lys Pro Gln Asn Ala Ala Asp Ser Tyr Ser Trp Val Pro
610 615 620

Glu Arg Ala Glu Ser Gln Ala Pro Glu Asn Gln Tyr Ser Pro Thr Pro
625 630 635 640

Gly Thr Asp Cys

<210> 6
<211> 688
<212> PRT
<213> Homo sapiens

<400> 6

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu
1 5 10 15

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr
20 25 30

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr
35 40 45

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn
50 55 60

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly
65 70 75 80

Arg Leu Cys Gly Gln Arg Ser Ser Asn Asn Pro His Ser Pro Ile Val
85 90 95

Glu Glu Phe Gln Val Pro Tyr Asn Lys Leu Gln Val Ile Phe Lys Ser
100 105 110

Asp Phe Ser Asn Glu Glu Arg Phe Thr Gly Phe Ala Ala Tyr Tyr Val
115 120 125

Ala Thr Asp Ile Asn Glu Cys Thr Asp Phe Val Asp Val Pro Cys Ser
130 135 140

His Phe Cys Asn Asn Phe Ile Gly Gly Tyr Phe Cys Ser Cys Pro Pro
145 150 155 160

Glu Tyr Phe Leu His Asp Asp Met Lys Asn Cys Gly Val Asn Cys Ser
165 170 175

Gly Asp Val Phe Thr Ala Leu Ile Gly Glu Ile Ala Ser Pro Asn Tyr
180 185 190

Pro Lys Pro Tyr Pro Glu Asn Ser Arg Cys Glu Tyr Gln Ile Arg Leu
195 200 205

Glu Lys Gly Phe Gln Val Val Val Thr Leu Arg Arg Glu Asp Phe Asp
210 215 220

Val Glu Ala Ala Asp Ser Ala Gly Asn Cys Leu Asp Ser Leu Val Phe
225 230 235 240

Val Ala Gly Asp Arg Gln Phe Gly Pro Tyr Cys Gly His Gly Phe Pro
245 250 255

Gly Pro Leu Asn Ile Glu Thr Lys Ser Asn Ala Leu Asp Ile Ile Phe
260 265 270

Gln Thr Asp Leu Thr Gly Gln Lys Lys Gly Trp Lys Leu Arg Tyr His
275 280 285

Gly Asp Pro Met Pro Cys Pro Lys Glu Asp Thr Pro Asn Ser Val Trp
290 295 300

Glu Pro Ala Lys Ala Lys Tyr Val Phe Arg Asp Val Val Gln Ile Thr
305 310 315 320

Cys Leu Asp Gly Phe Glu Val Val Glu Gly Arg Val Gly Ala Thr Ser

				325					330					335					
Phe	Tyr	Ser	Thr	Cys	Gln	Ser	Asn	Gly	Lys	Trp	Ser	Asn	Ser	Lys	Leu				
			340					345					350						
Lys	Cys	Gln	Pro	Val	Asp	Cys	Gly	Ile	Pro	Glu	Ser	Ile	Glu	Asn	Gly				
		355					360					365							
Lys	Val	Glu	Asp	Pro	Glu	Ser	Thr	Leu	Phe	Gly	Ser	Val	Ile	Arg	Tyr				
	370					375					380								
Thr	Cys	Glu	Glu	Pro	Tyr	Tyr	Tyr	Met	Glu	Asn	Gly	Gly	Gly	Gly	Glu				
385					390					395					400				
Tyr	His	Cys	Ala	Gly	Asn	Gly	Ser	Trp	Val	Asn	Glu	Val	Leu	Gly	Pro				
				405					410					415					
Glu	Leu	Pro	Lys	Cys	Val	Pro	Val	Cys	Gly	Val	Pro	Arg	Glu	Pro	Phe				
			420					425					430						
Glu	Glu	Lys	Gln	Arg	Ile	Ile	Gly	Gly	Ser	Asp	Ala	Asp	Ile	Lys	Asn				
		435					440					445							
Phe	Pro	Trp	Gln	Val	Phe	Phe	Asp	Asn	Pro	Trp	Ala	Gly	Gly	Ala	Leu				
	450					455					460								
Ile	Asn	Glu	Tyr	Trp	Val	Leu	Thr	Ala	Ala	His	Val	Val	Glu	Gly	Asn				
465					470					475					480				
Arg	Glu	Pro	Thr	Met	Tyr	Val	Gly	Ser	Thr	Ser	Val	Gln	Thr	Ser	Arg				
				485					490					495					
Leu	Ala	Lys	Ser	Lys	Met	Leu	Thr	Pro	Glu	His	Val	Phe	Ile	His	Pro				
			500					505					510						
Gly	Trp	Lys	Leu	Leu	Glu	Val	Pro	Glu	Gly	Arg	Thr	Asn	Phe	Asp	Asn				
		515					520					525							
Asp	Ile	Ala	Leu	Val	Arg	Leu	Lys	Asp	Pro	Val	Lys	Met	Gly	Pro	Thr				
	530					535					540								
Val	Ser	Pro	Ile	Cys	Leu	Pro	Gly	Thr	Ser	Ser	Asp	Tyr	Asn	Leu	Met				
545					550					555					560				

Asp Gly Asp Leu Gly Leu Ile Ser Gly Trp Gly Arg Thr Glu Lys Arg
565 570 575

Asp Arg Ala Val Arg Leu Lys Ala Ala Arg Leu Pro Val Ala Pro Leu
580 585 590

Arg Lys Cys Lys Glu Val Lys Val Glu Lys Pro Thr Ala Asp Ala Glu
595 600 605

Ala Tyr Val Phe Thr Pro Asn Met Ile Cys Ala Gly Gly Glu Lys Gly
610 615 620

Met Asp Ser Cys Lys Gly Asp Ser Gly Gly Ala Phe Ala Val Gln Asp
625 630 635 640

Pro Asn Asp Lys Thr Lys Phe Tyr Ala Ala Gly Leu Val Ser Trp Gly
645 650 655

Pro Gln Cys Gly Thr Tyr Gly Leu Tyr Thr Arg Val Lys Asn Tyr Val
660 665 670

Asp Trp Ile Met Lys Thr Met Gln Glu Asn Ser Thr Pro Arg Glu Asp
675 680 685

<210> 7
<211> 652
<212> PRT
<213> Homo sapiens

<400> 7

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg	Arg	Glu	Ala	Ala	Leu	Thr	Ala	Arg	Met	Ser	Lys	Phe	Trp	Ile	Gly	
				85					90						95	
Leu	Gln	Arg	Glu	Lys	Gly	Lys	Cys	Leu	Asp	Pro	Ser	Leu	Pro	Leu	Lys	
			100					105					110			
Gly	Phe	Ser	Trp	Val	Gly	Gly	Gly	Glu	Asp	Thr	Pro	Tyr	Ser	Asn	Trp	
		115					120					125				
His	Lys	Glu	Leu	Arg	Asn	Ser	Cys	Ile	Ser	Lys	Arg	Cys	Val	Ser	Leu	
	130					135					140					
Leu	Leu	Asp	Leu	Ser	Gln	Pro	Leu	Leu	Pro	Asn	Arg	Leu	Pro	Lys	Trp	
145					150					155					160	
Ser	Glu	Gly	Pro	Cys	Gly	Ser	Pro	Gly	Ser	Pro	Gly	Ser	Asn	Ile	Glu	
				165				170						175		
Gly	Phe	Val	Cys	Lys	Phe	Ser	Phe	Lys	Gly	Met	Cys	Arg	Pro	Leu	Ala	
			180					185					190			
Leu	Gly	Gly	Pro	Gly	Gln	Val	Thr	Tyr	Thr	Thr	Pro	Phe	Gln	Thr	Thr	
		195					200					205				
Ser	Ser	Ser	Leu	Glu	Ala	Val	Pro	Phe	Ala	Ser	Ala	Ala	Asn	Val	Ala	
	210					215					220					
Cys	Gly	Glu	Gly	Asp	Lys	Asp	Glu	Thr	Gln	Ser	His	Tyr	Phe	Leu	Cys	
225					230					235					240	
Lys	Glu	Lys	Ala	Pro	Asp	Val	Phe	Asp	Trp	Gly	Ser	Ser	Gly	Pro	Leu	
				245					250					255		
Cys	Val	Ser	Pro	Lys	Tyr	Gly	Cys	Asn	Phe	Asn	Asn	Gly	Gly	Cys	His	
			260					265					270			
Gln	Asp	Cys	Phe	Glu	Gly	Gly	Asp	Gly	Ser	Phe	Leu	Cys	Gly	Cys	Arg	
		275					280					285				
Pro	Gly	Phe	Arg	Leu	Leu	Asp	Asp	Leu	Val	Thr	Cys	Ala	Ser	Arg	Asn	
	290					295					300					

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Ser Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 8
<211> 248
<212> PRT
<213> Homo sapiens

<400> 8

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp

				85					90					95			
Pro	Gly	Lys	Ser	Pro	Asp	Gly	Asp	Ser	Ser	Leu	Ala	Ala	Ser	Glu	Arg		
			100					105					110				
Lys	Ala	Leu	Gln	Thr	Glu	Met	Ala	Arg	Ile	Lys	Lys	Trp	Leu	Thr	Phe		
		115					120					125					
Ser	Leu	Gly	Lys	Gln	Val	Gly	Asn	Lys	Phe	Phe	Leu	Thr	Asn	Gly	Glu		
	130					135					140						
Ile	Met	Thr	Phe	Glu	Lys	Val	Lys	Ala	Leu	Cys	Val	Lys	Phe	Gln	Ala		
145					150					155					160		
Ser	Val	Ala	Thr	Pro	Arg	Asn	Ala	Ala	Glu	Asn	Gly	Ala	Ile	Gln	Asn		
				165					170					175			
Leu	Ile	Lys	Glu	Glu	Ala	Phe	Leu	Gly	Ile	Thr	Asp	Glu	Lys	Thr	Glu		
			180					185					190				
Gly	Gln	Phe	Val	Asp	Leu	Thr	Gly	Asn	Arg	Leu	Thr	Tyr	Thr	Asn	Trp		
	195						200					205					
Asn	Glu	Gly	Glu	Pro	Asn	Asn	Ala	Gly	Ser	Asp	Glu	Asp	Cys	Val	Leu		
	210					215					220						
Leu	Leu	Lys	Asn	Gly	Gln	Trp	Asn	Asp	Val	Pro	Cys	Ser	Thr	Ser	His		
225					230					235					240		
Leu	Ala	Val	Cys	Glu	Phe	Pro	Ile										
				245													

<210> 9
 <211> 248
 <212> PRT
 <213> Homo sapiens

<400> 9

Met	Ser	Leu	Phe	Pro	Ser	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Met	Val	Ala		
1				5				10					15				

Ala	Ser	Tyr	Ser	Glu	Thr	Val	Thr	Cys	Glu	Asp	Ala	Gln	Lys	Thr	Cys		
			20					25					30				

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 10
<211> 643

<212> PRT

<213> Rattus norvegicus

<400> 10

Met Val Thr Ser Thr Gly Leu Leu Leu Leu Leu Gly Leu Leu Gly Gln
1 5 10 15

Leu Trp Ala Gly Ala Ala Ala Asp Ser Glu Ala Val Val Cys Glu Gly
20 25 30

Thr Ala Cys Tyr Thr Ala His Trp Gly Lys Leu Ser Ala Ala Glu Ala
35 40 45

Gln His Arg Cys Asn Glu Asn Gly Gly Asn Leu Ala Thr Val Lys Ser
50 55 60

Glu Glu Glu Ala Arg His Val Gln Glu Ala Leu Ala Gln Leu Leu Lys
65 70 75 80

Thr Lys Ala Pro Ser Glu Thr Lys Ile Gly Lys Phe Trp Ile Gly Leu
85 90 95

Gln Arg Glu Lys Gly Lys Cys Thr Tyr His Asp Leu Pro Met Lys Gly
100 105 110

Phe Ser Trp Val Gly Gly Gly Glu Asp Thr Thr Tyr Ser Asn Trp Tyr
115 120 125

Lys Ala Ser Lys Ser Ser Cys Ile Ser Lys Arg Cys Val Ser Leu Ile
130 135 140

Leu Asp Leu Ser Leu Lys Pro His Pro Ser His Leu Pro Lys Trp His
145 150 155 160

Glu Ser Pro Cys Gly Thr Pro Asp Ala Pro Gly Asn Ser Ile Glu Gly
165 170 175

Phe Leu Cys Lys Phe Asn Phe Lys Gly Met Cys Ser Pro Leu Ala Leu
180 185 190

Gly Gly Pro Gly Gln Leu Thr Tyr Thr Thr Pro Phe Gln Ala Thr Thr
195 200 205

Ser Ser Leu Lys Ala Val Pro Phe Ala Ser Val Ala Asn Val Val Cys

210						215						220					
Gly	Asp	Glu	Ala	Glu	Ser	Lys	Thr	Asn	Tyr	Tyr	Leu	Cys	Lys	Glu	Thr		
225					230					235					240		
Thr	Ala	Gly	Val	Phe	His	Trp	Gly	Ser	Ser	Gly	Pro	Leu	Cys	Val	Ser		
				245					250					255			
Pro	Lys	Phe	Gly	Cys	Ser	Phe	Asn	Asn	Gly	Gly	Cys	Gln	Gln	Asp	Cys		
			260					265					270				
Phe	Glu	Gly	Gly	Asp	Gly	Ser	Phe	Arg	Cys	Gly	Cys	Arg	Pro	Gly	Phe		
		275					280					285					
Arg	Leu	Leu	Asp	Asp	Leu	Val	Thr	Cys	Ala	Ser	Arg	Asn	Pro	Cys	Ser		
	290					295					300						
Ser	Asn	Pro	Cys	Thr	Gly	Gly	Gly	Met	Cys	His	Ser	Val	Pro	Leu	Ser		
305					310					315					320		
Glu	Asn	Tyr	Thr	Cys	His	Cys	Pro	Arg	Gly	Tyr	Gln	Leu	Asp	Ser	Ser		
				325					330					335			
Gln	Val	His	Cys	Val	Asp	Ile	Asp	Glu	Cys	Glu	Asp	Ser	Pro	Cys	Asp		
			340					345					350				
Gln	Glu	Cys	Ile	Asn	Thr	Pro	Gly	Gly	Phe	His	Cys	Glu	Cys	Trp	Val		
		355					360					365					
Gly	Tyr	Gln	Ser	Ser	Gly	Ser	Lys	Glu	Glu	Ala	Cys	Glu	Asp	Val	Asp		
	370					375					380						
Glu	Cys	Thr	Ala	Ala	Tyr	Ser	Pro	Cys	Ala	Gln	Gly	Cys	Thr	Asn	Thr		
385					390					395					400		
Asp	Gly	Ser	Phe	Tyr	Cys	Ser	Cys	Lys	Glu	Gly	Tyr	Ile	Met	Ser	Gly		
				405					410					415			
Glu	Asp	Ser	Thr	Gln	Cys	Glu	Asp	Ile	Asp	Glu	Cys	Leu	Gly	Asn	Pro		
			420					425					430				
Cys	Asp	Thr	Leu	Cys	Ile	Asn	Thr	Asp	Gly	Ser	Phe	Arg	Cys	Gly	Cys		
		435					440					445					

Pro Ala Gly Phe Glu Leu Ala Pro Asn Gly Val Ser Cys Thr Arg Gly
450 455 460

Ser Met Phe Ser Glu Leu Pro Ala Arg Pro Pro Gln Lys Glu Asp Lys
465 470 475 480

Gly Asp Gly Lys Glu Ser Thr Val Pro Leu Thr Glu Met Pro Gly Ser
485 490 495

Leu Asn Gly Ser Lys Asp Val Ser Asn Arg Ala Gln Thr Thr Asp Leu
500 505 510

Ser Ile Gln Ser Asp Ser Ser Thr Ala Ser Val Pro Leu Glu Ile Glu
515 520 525

Val Ser Ser Glu Ala Ser Asp Val Trp Leu Asp Leu Gly Thr Tyr Leu
530 535 540

Pro Thr Thr Ser Gly His Ser Gln Pro Thr His Glu Asp Ser Val Pro
545 550 555 560

Ala His Ser Asp Ser Asp Thr Asp Gly Gln Lys Leu Leu Leu Phe Tyr
565 570 575

Ile Leu Gly Thr Val Val Ala Ile Ser Leu Leu Leu Ala Leu Ala Leu
580 585 590

Gly Leu Leu Ile Tyr Leu Lys Arg Lys Ala Lys Lys Glu Glu Ile Lys
595 600 605

Glu Lys Lys Ala Gln Asn Ala Ala Asp Ser Tyr Ser Trp Ile Pro Glu
610 615 620

Arg Ala Glu Ser Arg Ala Pro Glu Asn Gln Tyr Ser Pro Thr Pro Gly
625 630 635 640

Thr Asp Cys

<210> 11
<211> 686
<212> PRT
<213> Homo sapiens

<400> 11

Met Arg Leu Leu Thr Leu Leu Gly Leu Leu Cys Gly Ser Val Ala Thr
1 5 10 15

Pro Leu Gly Pro Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Ala Ser
20 25 30

Pro Gly Phe Pro Gly Glu Tyr Ala Asn Asp Gln Glu Arg Arg Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser His Leu Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Ala Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp
85 90 95

Thr Glu Arg Ala Pro Gly Lys Asp Thr Phe Tyr Ser Leu Gly Ser Ser
100 105 110

Leu Asp Ile Thr Phe Arg Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Ile Asp Glu Cys Gln Val
130 135 140

Ala Pro Gly Glu Ala Pro Thr Cys Asp His His Cys His Asn His Leu
145 150 155 160

Gly Gly Phe Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Arg Asn
165 170 175

Lys Arg Thr Cys Ser Ala Leu Cys Ser Gly Gln Val Phe Thr Gln Arg
180 185 190

Ser Gly Glu Leu Ser Ser Pro Glu Tyr Pro Arg Pro Tyr Pro Lys Leu
195 200 205

Ser Ser Cys Thr Tyr Ser Ile Ser Leu Glu Glu Gly Phe Ser Val Ile
210 215 220

Leu Asp Phe Val Glu Ser Phe Asp Val Glu Thr His Pro Glu Thr Leu
225 230 235 240

Cys Pro Tyr Asp Phe Leu Lys Ile Gln Thr Asp Arg Glu Glu His Gly
245 250 255

Pro Phe Cys Gly Lys Thr Leu Pro His Arg Ile Glu Thr Lys Ser Asn
260 265 270

Thr Val Thr Ile Thr Phe Val Thr Asp Glu Ser Gly Asp His Thr Gly
275 280 285

Trp Lys Ile His Tyr Thr Ser Thr Ala Gln Pro Cys Pro Tyr Pro Met
290 295 300

Ala Pro Pro Asn Gly His Val Ser Pro Val Gln Ala Lys Tyr Ile Leu
305 310 315 320

Lys Asp Ser Phe Ser Ile Phe Cys Glu Thr Gly Tyr Glu Leu Leu Gln
325 330 335

Gly His Leu Pro Leu Lys Ser Phe Thr Ala Val Cys Gln Lys Asp Gly
340 345 350

Ser Trp Asp Arg Pro Met Pro Ala Cys Ser Ile Val Asp Cys Gly Pro
355 360 365

Pro Asp Asp Leu Pro Ser Gly Arg Val Glu Tyr Ile Thr Gly Pro Gly
370 375 380

Val Thr Thr Tyr Lys Ala Val Ile Gln Tyr Ser Cys Glu Glu Thr Phe
385 390 395 400

Tyr Thr Met Lys Val Asn Asp Gly Lys Tyr Val Cys Glu Ala Asp Gly
405 410 415

Phe Trp Thr Ser Ser Lys Gly Glu Lys Ser Leu Pro Val Cys Glu Pro
420 425 430

Val Cys Gly Leu Ser Ala Arg Thr Thr Gly Gly Arg Ile Tyr Gly Gly
435 440 445

Gln Lys Ala Lys Pro Gly Asp Phe Pro Trp Gln Val Leu Ile Leu Gly
450 455 460

Gly Thr Thr Ala Ala Gly Ala Leu Leu Tyr Asp Asn Trp Val Leu Thr
465 470 475 480

Ala Ala His Ala Val Tyr Glu Gln Lys His Asp Ala Ser Ala Leu Asp
485 490 495

Ile Arg Met Gly Thr Leu Lys Arg Leu Ser Pro His Tyr Thr Gln Ala
500 505 510

Trp Ser Glu Ala Val Phe Ile His Glu Gly Tyr Thr His Asp Ala Gly
515 520 525

Phe Asp Asn Asp Ile Ala Leu Ile Lys Leu Asn Asn Lys Val Val Ile
530 535 540

Asn Ser Asn Ile Thr Pro Ile Cys Leu Pro Arg Lys Glu Ala Glu Ser
545 550 555 560

Phe Met Arg Thr Asp Asp Ile Gly Thr Ala Ser Gly Trp Gly Leu Thr
565 570 575

Gln Arg Gly Phe Leu Ala Arg Asn Leu Met Tyr Val Asp Ile Pro Ile
580 585 590

Val Asp His Gln Lys Cys Thr Ala Ala Tyr Glu Lys Pro Pro Tyr Pro
595 600 605

Arg Gly Ser Val Thr Ala Asn Met Leu Cys Ala Gly Leu Glu Ser Gly
610 615 620

Gly Lys Asp Ser Cys Arg Gly Asp Ser Gly Gly Ala Leu Val Phe Leu
625 630 635 640

Asp Ser Glu Thr Glu Arg Trp Phe Val Gly Gly Ile Val Ser Trp Gly
645 650 655

Ser Met Asn Cys Gly Glu Ala Gly Gln Tyr Gly Val Tyr Thr Lys Val
660 665 670

Ile Asn Tyr Ile Pro Trp Ile Glu Asn Ile Ile Ser Asp Phe
675 680 685

<210> 12
<211> 185
<212> PRT
<213> Homo sapiens

<400> 12

Met Arg Leu Leu Thr Leu Leu Gly Leu Leu Cys Gly Ser Val Ala Thr
1 5 10 15

Pro Leu Gly Pro Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Ala Ser
20 25 30

Pro Gly Phe Pro Gly Glu Tyr Ala Asn Asp Gln Glu Arg Arg Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser His Leu Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Ala Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp
85 90 95

Thr Glu Arg Ala Pro Gly Lys Asp Thr Phe Tyr Ser Leu Gly Ser Ser
100 105 110

Leu Asp Ile Thr Phe Arg Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Ile Asp Glu Cys Gln Val
130 135 140

Ala Pro Gly Glu Ala Pro Thr Cys Asp His His Cys His Asn His Leu
145 150 155 160

Gly Gly Phe Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Arg Asn
165 170 175

Lys Arg Thr Cys Ser Glu Gln Ser Leu
180 185

<210> 13
<211> 728
<212> PRT

<213> Homo sapiens

<400> 13

Met Arg Trp Leu Leu Leu Tyr Tyr Ala Leu Cys Phe Ser Leu Ser Lys
1 5 10 15

Ala Ser Ala His Thr Val Glu Leu Asn Asn Met Phe Gly Gln Ile Gln
20 25 30

Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Ser Asp Ser Glu Val Thr Trp
35 40 45

Asn Ile Thr Val Pro Asp Gly Phe Arg Ile Lys Leu Tyr Phe Met His
50 55 60

Phe Asn Leu Glu Ser Ser Tyr Leu Cys Glu Tyr Asp Tyr Val Lys Val
65 70 75 80

Glu Thr Glu Asp Gln Val Leu Ala Thr Phe Cys Gly Arg Glu Thr Thr
85 90 95

Asp Thr Glu Gln Thr Pro Gly Gln Glu Val Val Leu Ser Pro Gly Ser
100 105 110

Phe Met Ser Ile Thr Phe Arg Ser Asp Phe Ser Asn Glu Glu Arg Phe
115 120 125

Thr Gly Phe Asp Ala His Tyr Met Ala Val Asp Val Asp Glu Cys Lys
130 135 140

Glu Arg Glu Asp Glu Glu Leu Ser Cys Asp His Tyr Cys His Asn Tyr
145 150 155 160

Ile Gly Gly Tyr Tyr Cys Ser Cys Arg Phe Gly Tyr Ile Leu His Thr
165 170 175

Asp Asn Arg Thr Cys Arg Val Glu Cys Ser Asp Asn Leu Phe Thr Gln
180 185 190

Arg Thr Gly Val Ile Thr Ser Pro Asp Phe Pro Asn Pro Tyr Pro Lys
195 200 205

Ser Ser Glu Cys Leu Tyr Thr Ile Glu Leu Glu Glu Gly Phe Met Val
210 215 220

Asn Leu Gln Phe Glu Asp Ile Phe Asp Ile Glu Asp His Pro Glu Val
225 230 235 240

Pro Cys Pro Tyr Asp Tyr Ile Lys Ile Lys Val Gly Pro Lys Val Leu
245 250 255

Gly Pro Phe Cys Gly Glu Lys Ala Pro Glu Pro Ile Ser Thr Gln Ser
260 265 270

His Ser Val Leu Ile Leu Phe His Ser Asp Asn Ser Gly Glu Asn Arg
275 280 285

Gly Trp Arg Leu Ser Tyr Arg Ala Ala Gly Asn Glu Cys Pro Glu Leu
290 295 300

Gln Pro Pro Val His Gly Lys Ile Glu Pro Ser Gln Ala Lys Tyr Phe
305 310 315 320

Phe Lys Asp Gln Val Leu Val Ser Cys Asp Thr Gly Tyr Lys Val Leu
325 330 335

Lys Asp Asn Val Glu Met Asp Thr Phe Gln Ile Glu Cys Leu Lys Asp
340 345 350

Gly Thr Trp Ser Asn Lys Ile Pro Thr Cys Lys Ile Val Asp Cys Arg
355 360 365

Ala Pro Gly Glu Leu Glu His Gly Leu Ile Thr Phe Ser Thr Arg Asn
370 375 380

Asn Leu Thr Thr Tyr Lys Ser Glu Ile Lys Tyr Ser Cys Gln Glu Pro
385 390 395 400

Tyr Tyr Lys Met Leu Asn Asn Asn Thr Gly Ile Tyr Thr Cys Ser Ala
405 410 415

Gln Gly Val Trp Met Asn Lys Val Leu Gly Arg Ser Leu Pro Thr Cys
420 425 430

Leu Pro Glu Cys Gly Gln Pro Ser Arg Ser Leu Pro Ser Leu Val Lys
435 440 445

Arg Ile Ile Gly Gly Arg Asn Ala Glu Pro Gly Leu Phe Pro Trp Gln
450 455 460

Ala Leu Ile Val Val Glu Asp Thr Ser Arg Val Pro Asn Asp Lys Trp
465 470 475 480

Phe Gly Ser Gly Ala Leu Leu Ser Ala Ser Trp Ile Leu Thr Ala Ala
485 490 495

His Val Leu Arg Ser Gln Arg Arg Asp Thr Thr Val Ile Pro Val Ser
500 505 510

Lys Glu His Val Thr Val Tyr Leu Gly Leu His Asp Val Arg Asp Lys
515 520 525

Ser Gly Ala Val Asn Ser Ser Ala Ala Arg Val Val Leu His Pro Asp
530 535 540

Phe Asn Ile Gln Asn Tyr Asn His Asp Ile Ala Leu Val Gln Leu Gln
545 550 555 560

Glu Pro Val Pro Leu Gly Pro His Val Met Pro Val Cys Leu Pro Arg
565 570 575

Leu Glu Pro Glu Gly Pro Ala Pro His Met Leu Gly Leu Val Ala Gly
580 585 590

Trp Gly Ile Ser Asn Pro Asn Val Thr Val Asp Glu Ile Ile Ser Ser
595 600 605

Gly Thr Arg Thr Leu Ser Asp Val Leu Gln Tyr Val Lys Leu Pro Val
610 615 620

Val Pro His Ala Glu Cys Lys Thr Ser Tyr Glu Ser Arg Ser Gly Asn
625 630 635 640

Tyr Ser Val Thr Glu Asn Met Phe Cys Ala Gly Tyr Tyr Glu Gly Gly
645 650 655

Lys Asp Thr Cys Leu Gly Asp Ser Gly Gly Ala Phe Val Ile Phe Asp
660 665 670

Asp Leu Ser Gln Arg Trp Val Val Gln Gly Leu Val Ser Trp Gly Gly
675 680 685

Pro Glu Glu Cys Gly Ser Lys Gln Val Tyr Gly Val Tyr Thr Lys Val
690 695 700

Ser Asn Tyr Val Asp Trp Val Trp Glu Gln Met Gly Leu Pro Gln Ser
705 710 715 720

Val Val Glu Pro Gln Val Glu Arg
725

<210> 14
<211> 699
<212> PRT
<213> Homo sapiens

<400> 14

Met Arg Trp Leu Leu Leu Tyr Tyr Ala Leu Cys Phe Ser Leu Ser Lys
1 5 10 15

Ala Ser Ala His Thr Val Glu Leu Asn Asn Met Phe Gly Gln Ile Gln
20 25 30

Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Ser Asp Ser Glu Val Thr Trp
35 40 45

Asn Ile Thr Val Pro Asp Gly Phe Arg Ile Lys Leu Tyr Phe Met His
50 55 60

Phe Asn Leu Glu Ser Ser Tyr Leu Cys Glu Tyr Asp Tyr Val Lys Val
65 70 75 80

Glu Thr Glu Asp Gln Val Leu Ala Thr Phe Cys Gly Arg Glu Thr Thr
85 90 95

Asp Thr Glu Gln Thr Pro Gly Gln Glu Val Val Leu Ser Pro Gly Ser
100 105 110

Phe Met Ser Ile Thr Phe Arg Ser Asp Phe Ser Asn Glu Glu Arg Phe
115 120 125

Thr Gly Phe Asp Ala His Tyr Met Ala Val Asp Val Asp Glu Cys Lys
130 135 140

Glu Arg Glu Asp Glu Glu Leu Ser Cys Asp His Tyr Cys His Asn Tyr

145					150						155				160
Ile	Gly	Gly	Tyr	Tyr	Cys	Ser	Cys	Arg	Phe	Gly	Tyr	Ile	Leu	His	Thr
				165					170					175	
Asp	Asn	Arg	Thr	Cys	Arg	Val	Glu	Cys	Ser	Asp	Asn	Leu	Phe	Thr	Gln
			180					185					190		
Arg	Thr	Gly	Val	Ile	Thr	Ser	Pro	Asp	Phe	Pro	Asn	Pro	Tyr	Pro	Lys
		195					200					205			
Ser	Ser	Glu	Cys	Leu	Tyr	Thr	Ile	Glu	Leu	Glu	Glu	Gly	Phe	Met	Val
	210					215					220				
Asn	Leu	Gln	Phe	Glu	Asp	Ile	Phe	Asp	Ile	Glu	Asp	His	Pro	Glu	Val
225					230					235					240
Pro	Cys	Pro	Tyr	Asp	Tyr	Ile	Lys	Ile	Lys	Val	Gly	Pro	Lys	Val	Leu
				245					250					255	
Gly	Pro	Phe	Cys	Gly	Glu	Lys	Ala	Pro	Glu	Pro	Ile	Ser	Thr	Gln	Ser
			260					265					270		
His	Ser	Val	Leu	Ile	Leu	Phe	His	Ser	Asp	Asn	Ser	Gly	Glu	Asn	Arg
		275					280					285			
Gly	Trp	Arg	Leu	Ser	Tyr	Arg	Ala	Ala	Gly	Asn	Glu	Cys	Pro	Glu	Leu
	290					295					300				
Gln	Pro	Pro	Val	His	Gly	Lys	Ile	Glu	Pro	Ser	Gln	Ala	Lys	Tyr	Phe
305					310					315					320
Phe	Lys	Asp	Gln	Val	Leu	Val	Ser	Cys	Asp	Thr	Gly	Tyr	Lys	Val	Leu
			325						330					335	
Lys	Asp	Asn	Val	Glu	Met	Asp	Thr	Phe	Gln	Ile	Glu	Cys	Leu	Lys	Asp
			340					345					350		
Gly	Thr	Trp	Ser	Asn	Lys	Ile	Pro	Thr	Cys	Lys	Ile	Val	Asp	Cys	Arg
		355					360					365			
Ala	Pro	Gly	Glu	Leu	Glu	His	Gly	Leu	Ile	Thr	Phe	Ser	Thr	Arg	Asn
	370					375					380				

Asn Leu Thr Thr Tyr Lys Ser Glu Ile Lys Tyr Ser Cys Gln Glu Pro
385 390 395 400

Tyr Tyr Lys Met Leu Asn Asn Asn Thr Gly Ile Tyr Thr Cys Ser Ala
405 410 415

Gln Gly Val Trp Met Asn Lys Val Leu Gly Arg Ser Leu Pro Thr Cys
420 425 430

Leu Pro Val Cys Gly Leu Pro Lys Phe Ser Arg Lys Leu Met Ala Arg
435 440 445

Ile Phe Asn Gly Arg Pro Ala Gln Lys Gly Thr Thr Pro Trp Ile Ala
450 455 460

Met Leu Ser His Leu Asn Gly Gln Pro Phe Cys Gly Gly Ser Leu Leu
465 470 475 480

Gly Ser Ser Trp Ile Val Thr Ala Ala His Cys Leu His Gln Ser Leu
485 490 495

Asp Pro Glu Asp Pro Thr Leu Arg Asp Ser Asp Leu Leu Ser Pro Ser
500 505 510

Asp Phe Lys Ile Ile Leu Gly Lys His Trp Arg Leu Arg Ser Asp Glu
515 520 525

Asn Glu Gln His Leu Gly Val Lys His Thr Thr Leu His Pro Gln Tyr
530 535 540

Asp Pro Asn Thr Phe Glu Asn Asp Val Ala Leu Val Glu Leu Leu Glu
545 550 555 560

Ser Pro Val Leu Asn Ala Phe Val Met Pro Ile Cys Leu Pro Glu Gly
565 570 575

Pro Gln Gln Glu Gly Ala Met Val Ile Val Ser Gly Trp Gly Lys Gln
580 585 590

Phe Leu Gln Arg Phe Pro Glu Thr Leu Met Glu Ile Glu Ile Pro Ile
595 600 605

Val Asp His Ser Thr Cys Gln Lys Ala Tyr Ala Pro Leu Lys Lys Lys

610

615

620

Val Thr Arg Asp Met Ile Cys Ala Gly Glu Lys Glu Gly Gly Lys Asp
 625 630 635 640

Ala Cys Ala Gly Asp Ser Gly Gly Pro Met Val Thr Leu Asn Arg Glu
 645 650 655

Arg Gly Gln Trp Tyr Leu Val Gly Thr Val Ser Trp Gly Asp Asp Cys
 660 665 670

Gly Lys Lys Asp Arg Tyr Gly Val Tyr Ser Tyr Ile His His Asn Lys
 675 680 685

Asp Trp Ile Gln Arg Val Thr Gly Val Arg Asn
 690 695

<210> 15
 <211> 239
 <212> PRT
 <213> Mus musculus

<220>
 <221> MISC_FEATURE
 <222> (91)..(116)
 <223> Unknown

<400> 15

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
 1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
 20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
 35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
 50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
 65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Xaa Xaa Xaa Xaa Xaa Xaa
 85 90 95

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

Xaa Xaa Xaa Xaa His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 16
<211> 185
<212> PRT
<213> Oncorhynchus mykiss

<400> 16

Met Glu Lys Leu Ala Ile Leu Leu Leu Leu Ser Ala Ser Ile Ala Leu
1 5 10 15

Gly Asp Ala Asn Leu Thr Gln Leu Leu Gly Leu Glu Pro Leu Leu Lys
20 25 30

Thr Lys Val Glu Gln Thr Thr Pro Glu Ala Gln Val Glu Ala Val Gln
35 40 45

Glu Gly Ile Lys Glu Gly Ser Cys Pro Ser Asp Trp Tyr Thr Tyr Gly

50

55

60

Ser His Cys Phe Lys Phe Val Ser Ile Gln Gln Ser Phe Val Asp Ser
65 70 75 80

Glu Gln Asn Cys Leu Ala Leu Gly Gly Asn Leu Ala Ser Val His Ser
85 90 95

Leu Leu Glu Tyr Gln Phe Met Gln Ala Leu Thr Lys Asp Ala Asn Gly
100 105 110

His Leu His Ser Thr Trp Leu Gly Gly Phe Asp Ala Ile Lys Glu Gly
115 120 125

Thr Trp Met Trp Ser Asp Gly Ser Arg Phe Asp Tyr Thr Asn Trp Asp
130 135 140

Thr Asp Glu Pro Asn Asn Ala Gly Glu Gly Glu Asp Cys Leu His Met
145 150 155 160

Asn Ala Ala Ser Ala Lys Leu Trp Phe Asp Val Pro Cys Glu Trp Lys
165 170 175

Phe Ala Ser Leu Cys Ser Arg Arg Met
180 185

<210> 17
<211> 240
<212> PRT
<213> Sus scrofa

<400> 17

Met Ser Leu Phe Pro Ser Leu His Leu Leu Leu Leu Ile Val Met Thr
1 5 10 15

Ala Ser His Thr Glu Thr Glu Asn Cys Glu Asp Ile Gln Asn Thr Cys
20 25 30

Leu Val Ile Ser Cys Asp Ser Pro Gly Ile Asn Gly Leu Pro Gly Lys
35 40 45

Asp Gly Leu Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly
50 55 60

Leu Ile Gly Leu Gln Gly Leu Pro Gly Met Val Gly Pro Gln Gly Ser
65 70 75 80

Pro Gly Ile Pro Gly Leu Pro Gly Leu Lys Gly Gln Lys Gly Asp Ser
85 90 95

Gly Ile Asp Pro Gly Asn Ser Leu Ala Asn Leu Arg Ser Glu Leu Asp
100 105 110

Asn Ile Lys Lys Trp Leu Ile Phe Ala Gln Gly Lys Gln Val Gly Lys
115 120 125

Lys Leu Tyr Leu Thr Asn Gly Lys Lys Met Ser Phe Asn Gly Val Lys
130 135 140

Ala Leu Cys Ala Gln Phe Gln Ala Ser Val Ala Thr Pro Thr Asn Ser
145 150 155 160

Arg Glu Asn Gln Ala Ile Gln Glu Leu Ala Gly Thr Glu Ala Phe Leu
165 170 175

Gly Ile Thr Asp Glu Tyr Thr Glu Gly Gln Phe Val Asp Leu Thr Gly
180 185 190

Lys Arg Val Arg Tyr Gln Asn Trp Asn Asp Gly Glu Pro Asn Asn Ala
195 200 205

Asp Ser Ala Glu His Cys Val Glu Ile Leu Lys Asp Gly Lys Trp Asn
210 215 220

Asp Ile Phe Cys Ser Ser Gln Leu Ser Ala Val Cys Glu Phe Pro Ala
225 230 235 240

<210> 18
<211> 239
<212> PRT
<213> Mus musculus

<400> 18

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 19
<211> 244
<212> PRT
<213> Mus musculus

<400> 19

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
 225 230 235 240

Glu Phe Ser Asp

<210> 20
 <211> 381
 <212> PRT
 <213> Macaca nemestrina

<400> 20

Met Ser Asp Ser Lys Glu Pro Arg Leu Gln Gln Leu Asp Leu Leu Glu
 1 5 10 15

Glu Glu Gln Leu Gly Gly Val Gly Phe Arg Gln Thr Arg Gly Tyr Lys
 20 25 30

Ser Leu Ala Gly Cys Leu Gly His Gly Pro Leu Val Leu Gln Leu Leu
 35 40 45

Ser Phe Thr Leu Leu Ala Gly Leu Leu Val Gln Val Ser Lys Val Pro
 50 55 60

Ser Ser Leu Ser Gln Gly Gln Ser Lys Gln Asp Ala Ile Tyr Gln Asn
 65 70 75 80

Leu Thr Gln Leu Lys Val Ala Val Ser Glu Leu Ser Glu Lys Ser Lys
 85 90 95

Gln Gln Glu Ile Tyr Gln Glu Leu Thr Arg Leu Lys Ala Ala Val Gly
 100 105 110

Glu Leu Pro Glu Lys Ser Lys Gln Gln Glu Ile Tyr Glu Glu Leu Thr
 115 120 125

Arg Leu Arg Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Leu Gln
 130 135 140

Glu Ile Tyr Gln Glu Leu Thr Arg Leu Lys Ala Ala Val Gly Glu Leu
 145 150 155 160

Pro Glu Lys Ser Lys Gln Gln Glu Ile Tyr Gln Glu Leu Ser Arg Leu
 165 170 175

Lys Ala Ala Val Gly Asp Leu Pro Glu Lys Ser Lys Gln Gln Glu Ile
180 185 190

Tyr Gln Lys Leu Thr Gln Leu Lys Ala Ala Val Asp Gly Leu Pro Asp
195 200 205

Arg Ser Lys Gln Gln Glu Ile Tyr Gln Glu Leu Ile Gln Leu Lys Ala
210 215 220

Ala Val Glu Arg Leu Cys His Pro Cys Pro Trp Glu Trp Thr Phe Phe
225 230 235 240

Gln Gly Asn Cys Tyr Phe Met Ser Asn Ser Gln Arg Asn Trp His Asp
245 250 255

Ser Ile Thr Ala Cys Gln Glu Val Gly Ala Gln Leu Val Val Ile Lys
260 265 270

Ser Ala Glu Glu Gln Asn Phe Leu Gln Leu Gln Ser Ser Arg Ser Asn
275 280 285

Arg Phe Thr Trp Met Gly Leu Ser Asp Leu Asn His Glu Gly Thr Trp
290 295 300

Gln Trp Val Asp Gly Ser Pro Leu Leu Pro Ser Phe Lys Gln Tyr Trp
305 310 315 320

Asn Lys Gly Glu Pro Asn Asn Val Gly Glu Glu Asp Cys Ala Glu Phe
325 330 335

Ser Gly Asn Gly Trp Asn Asp Asp Lys Cys Asn Leu Ala Lys Phe Trp
340 345 350

Ile Cys Lys Lys Ser Ala Ala Ser Cys Ser Gly Asp Glu Glu Arg Leu
355 360 365

Leu Ser Pro Ala Pro Thr Thr Pro Asn Pro Pro Pro Ala
370 375 380

<210> 21

<211> 246

<212> PRT

<213> Carassius auratus

<400> 21

Leu Leu Leu Leu Gln Phe Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro
1 5 10 15

Gln Asn Leu Asn Cys Pro Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly
20 25 30

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala
35 40 45

Ile Gly Pro Lys Gly Glu Lys Gly Glu Ser Gly Val Ser Val Gln Gly
50 55 60

Pro Pro Gly Lys Ala Gly Pro Pro Gly Thr Ala Gly Glu Lys Gly Glu
65 70 75 80

Arg Gly Pro Ser Gly Pro Gln Gly Ser Pro Gly Ser Glu Ser Val Leu
85 90 95

Glu Ser Leu Lys Ser Glu Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr
100 105 110

Phe Glu Lys Val Ser Ser Val Cys His Phe Arg Lys Val Gly Gln Lys
115 120 125

Tyr Tyr Ile Thr Asp Gly Val Val Gly Asn Phe Asp Gln Gly Leu Lys
130 135 140

Ser Cys Met Glu Phe Gly Gly Thr Met Val Ser Pro Arg Thr Ser Ala
145 150 155 160

Glu Asn Gln Ala Leu Leu Lys Leu Val Val Ser Ser Gly Leu Gly Ser
165 170 175

Lys Lys Pro Tyr Ile Gly Val Thr Asp Arg Lys Thr Glu Gly Gln Phe
180 185 190

Val Asp Thr Glu Gly Lys Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly
195 200 205

Gln Pro Asp Asp Tyr Lys Gly Leu Gln Asp Cys Gly Val Ile Glu Asp
210 215 220

Thr Gly Leu Trp Asp Asp Gly Gly Cys Gly Asp Ile Arg Pro Ile Met
225 230 235 240

Cys Glu Ile Asp Ile Lys
245

<210> 22
<211> 251
<212> PRT
<213> Danio rerio

<400> 22

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 23
<211> 256
<212> PRT
<213> Cyprinus carpio

<400> 23

Met Ala Leu Phe Lys Leu Phe Leu Gly Thr Leu Leu Leu Leu Gln Phe
1 5 10 15

Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro Gln Asn Leu Asn Cys Pro
20 25 30

Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala Ile Gly Pro Lys Gly Glu
50 55 60

Lys Gly Glu Ser Gly Val Ser Val Gln Gly Pro Pro Gly Lys Ala Gly
65 70 75 80

Pro Pro Gly Pro Ala Gly Glu Lys Gly Glu Arg Gly Pro Thr Gly Ser
85 90 95

Gln Gly Ser Pro Gly Ser Glu Ser Val Leu Glu Ser Leu Lys Ser Glu
100 105 110

Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr Phe Glu Lys Val Ala Ser
115 120 125

Val Gly His Phe Arg Gln Val Gly Gln Lys Tyr Tyr Ile Thr Asp Gly
130 135 140

Val Val Gly Thr Phe Asp Gln Gly Leu Lys Phe Cys Lys Asp Phe Gly
145 150 155 160

Gly Thr Met Val Phe Pro Arg Thr Ser Ala Glu Asn Gln Ala Leu Leu
165 170 175

Lys Leu Val Val Ser Ser Gly Leu Ser Ser Lys Lys Pro Tyr Ile Gly
180 185 190

Val Thr Asp Arg Glu Thr Glu Gly Arg Phe Val Asn Thr Glu Gly Lys
195 200 205

Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly Gln Pro Asp Asp Tyr Lys
210 215 220

Gly Leu Gln Asp Cys Gly Val Ile Glu Asp Ser Gly Leu Trp Asp Asp
225 230 235 240

Gly Ser Cys Gly Asp Ile Arg Pro Ile Met Cys Glu Ile Asp Asn Lys
245 250 255

<210> 24
<211> 31
<212> PRT
<213> Sus scrofa

<400> 24

Thr Lys Gly Glu Lys Gly Glu Pro Gly Pro Gly Phe Arg Gly Ser Gln
1 5 10 15

Gly Pro Pro Gly Lys Met Gly Pro Pro Gly Asn Ile Gly Glu Thr
20 25 30

<210> 25
<211> 254
<212> PRT
<213> Gallus gallus

<400> 25

Met Thr Leu Leu Gln Pro Phe Ser Ala Leu Leu Leu Cys Leu Ser Leu
1 5 10 15

Met	Met	Ala	Thr	Ser	Leu	Leu	Thr	Thr	Asp	Lys	Pro	Glu	Glu	Lys	Met
			20					25					30		
Tyr	Ser	Cys	Pro	Ile	Ile	Gln	Cys	Ser	Ala	Pro	Ala	Val	Asn	Gly	Leu
		35					40					45			
Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Pro	Lys	Gly	Glu	Lys	Gly	Asp	Pro
	50					55					60				
Gly	Glu	Gly	Leu	Arg	Gly	Leu	Gln	Gly	Leu	Pro	Gly	Lys	Ala	Gly	Pro
65					70					75					80
Gln	Gly	Leu	Lys	Gly	Glu	Val	Gly	Pro	Gln	Gly	Glu	Lys	Gly	Gln	Lys
				85					90					95	
Gly	Glu	Arg	Gly	Ile	Val	Val	Thr	Asp	Asp	Leu	His	Arg	Gln	Ile	Thr
			100					105						110	
Asp	Leu	Glu	Ala	Lys	Ile	Arg	Val	Leu	Glu	Asp	Asp	Leu	Ser	Arg	Tyr
		115					120					125			
Lys	Lys	Ala	Leu	Ser	Leu	Lys	Asp	Val	Val	Asn	Val	Gly	Lys	Lys	Met
	130					135					140				
Phe	Val	Ser	Thr	Gly	Lys	Lys	Tyr	Asn	Phe	Glu	Lys	Gly	Lys	Ser	Leu
145					150					155					160
Cys	Ala	Lys	Ala	Gly	Ser	Val	Leu	Ala	Ser	Pro	Arg	Asn	Glu	Ala	Glu
				165					170					175	
Asn	Thr	Ala	Leu	Lys	Asp	Leu	Ile	Asp	Pro	Ser	Ser	Gln	Ala	Tyr	Ile
			180					185					190		
Gly	Ile	Ser	Asp	Ala	Gln	Thr	Glu	Gly	Arg	Phe	Met	Tyr	Leu	Ser	Gly
		195					200					205			
Gly	Pro	Leu	Thr	Tyr	Ser	Asn	Trp	Lys	Pro	Gly	Glu	Pro	Asn	Asn	His
	210					215					220				
Lys	Asn	Glu	Asp	Cys	Ala	Val	Ile	Glu	Asp	Ser	Gly	Lys	Trp	Asn	Asp
225					230					235					240

Leu Asp Cys Ser Asn Ser Asn Ile Phe Ile Ile Cys Glu Leu
245 250

<210> 26
<211> 244
<212> PRT
<213> Mus musculus

<400> 26

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 27
<211> 239
<212> PRT
<213> Mus musculus

<400> 27

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 28
<211> 238
<212> PRT
<213> Rattus norvegicus

<400> 28

Met Leu Leu Leu Pro Leu Leu Val Leu Leu Cys Val Val Ser Val Ser
1 5 10 15

Ser Ser Gly Ser Gln Thr Cys Glu Glu Thr Leu Lys Thr Cys Ser Val
20 25 30

Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys Gly
35 40 45

Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu
50 55 60

Gly Pro Pro Gly Ser Val Gly Ala Pro Gly Ser Gln Gly Pro Lys Gly
65 70 75 80

Gln Lys Gly Asp Arg Gly Asp Ser Arg Ala Ile Glu Val Lys Leu Ala
85 90 95

Asn Met Glu Ala Glu Ile Asn Thr Leu Lys Ser Lys Leu Glu Leu Thr

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Ala Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Ser Lys Gly Ala Thr Gly Pro Lys Gly Asp Arg Gly Glu Ser
85 90 95

Val Glu Phe Asp Thr Thr Asn Ile Asp Leu Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Met Arg Lys Trp Val Leu Leu Ser Met Ser Glu
115 120 125

Asn Val Gly Lys Lys Tyr Phe Met Ser Ser Val Arg Arg Met Pro Leu
130 135 140

Asn Arg Ala Lys Ala Leu Cys Ser Glu Leu Gln Gly Thr Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Arg Ala Ile Gln Asn Val Ala Lys Asp
165 170 175

Val Ala Phe Leu Gly Ile Thr Asp Gln Arg Thr Glu Asn Val Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Glu Gly Glu
195 200 205

Pro Asn Asn Val Gly Ser Gly Glu Asn Cys Val Val Leu Leu Thr Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Val Val Cys
225 230 235 240

Glu Phe Ser Asp

<210> 30
<211> 248
<212> PRT
<213> Homo sapiens

<400> 30

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile

245

<210> 31
<211> 329
<212> PRT
<213> Homo sapiens

<400> 31

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu
1 5 10 15

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr
20 25 30

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr
35 40 45

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn
50 55 60

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly
65 70 75 80

Arg Leu Cys Gly Gln Arg Ser Ser Asn Asn Pro His Ser Pro Ile Val
85 90 95

Glu Glu Phe Gln Val Pro Tyr Asn Lys Leu Gln Val Ile Phe Lys Ser
100 105 110

Asp Phe Ser Asn Glu Glu Arg Phe Thr Gly Phe Ala Ala Tyr Tyr Val
115 120 125

Ala Thr Asp Ile Asn Glu Cys Thr Asp Phe Val Asp Val Pro Cys Ser
130 135 140

His Phe Cys Asn Asn Phe Ile Gly Gly Tyr Phe Cys Ser Cys Pro Pro
145 150 155 160

Glu Tyr Phe Leu His Asp Asp Met Lys Asn Cys Gly Val Asn Cys Ser
165 170 175

Gly Asp Val Phe Thr Ala Leu Ile Gly Glu Ile Ala Ser Pro Asn Tyr
180 185 190

Pro Lys Pro Tyr Pro Glu Asn Ser Arg Cys Glu Tyr Gln Ile Arg Leu
195 200 205

Glu Lys Gly Phe Gln Val Val Val Thr Leu Arg Arg Glu Asp Phe Asp
210 215 220

Val Glu Ala Ala Asp Ser Ala Gly Asn Cys Leu Asp Ser Leu Val Phe
225 230 235 240

Val Ala Gly Asp Arg Gln Phe Gly Pro Tyr Cys Gly His Gly Phe Pro
245 250 255

Gly Pro Leu Asn Ile Glu Thr Lys Ser Asn Ala Leu Asp Ile Ile Phe
260 265 270

Gln Thr Asp Leu Thr Gly Gln Lys Lys Gly Trp Lys Leu Arg Tyr His
275 280 285

Gly Asp Pro Met Pro Cys Pro Lys Glu Asp Thr Pro Asn Ser Val Trp
290 295 300

Glu Pro Ala Lys Ala Lys Tyr Val Phe Arg Asp Val Val Gln Ile Thr
305 310 315 320

Cys Leu Asp Gly Phe Glu Val Val Glu
325

<210> 32
<211> 248
<212> PRT
<213> Homo sapiens

<400> 32

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Cys Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 33
<211> 248
<212> PRT
<213> Homo sapiens

<400> 33

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 34
<211> 248
<212> PRT
<213> Homo sapiens

<400> 34

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 35
<211> 248
<212> PRT
<213> Homo sapiens

<400> 35

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Asp Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 36
<211> 248
<212> PRT
<213> Homo sapiens

<400> 36

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Glu Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp

				85					90					95			
Pro	Gly	Lys	Ser	Pro	Asp	Gly	Asp	Ser	Ser	Leu	Ala	Ala	Ser	Glu	Arg		
			100					105					110				
Lys	Ala	Leu	Gln	Thr	Glu	Met	Ala	Arg	Ile	Lys	Lys	Trp	Leu	Thr	Phe		
		115					120					125					
Ser	Leu	Gly	Lys	Gln	Val	Gly	Asn	Lys	Phe	Phe	Leu	Thr	Asn	Gly	Glu		
	130					135					140						
Ile	Met	Thr	Phe	Glu	Lys	Val	Lys	Ala	Leu	Cys	Val	Lys	Phe	Gln	Ala		
145					150					155					160		
Ser	Val	Ala	Thr	Pro	Arg	Asn	Ala	Ala	Glu	Asn	Gly	Ala	Ile	Gln	Asn		
				165					170					175			
Leu	Ile	Lys	Glu	Glu	Ala	Phe	Leu	Gly	Ile	Thr	Asp	Glu	Lys	Thr	Glu		
			180					185					190				
Gly	Gln	Phe	Val	Asp	Leu	Thr	Gly	Asn	Arg	Leu	Thr	Tyr	Thr	Asn	Trp		
	195						200					205					
Asn	Glu	Gly	Glu	Pro	Asn	Asn	Ala	Gly	Ser	Asp	Glu	Asp	Cys	Val	Leu		
	210					215					220						
Leu	Leu	Lys	Asn	Gly	Gln	Trp	Asn	Asp	Val	Pro	Cys	Ser	Thr	Ser	His		
225					230					235					240		
Leu	Ala	Val	Cys	Glu	Phe	Pro	Ile										
				245													

<210> 37
 <211> 248
 <212> PRT
 <213> Homo sapiens
 <400> 37

Met	Ser	Leu	Phe	Pro	Ser	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Met	Val	Ala		
1				5				10					15				
Ala	Ser	Tyr	Ser	Glu	Thr	Val	Thr	Cys	Glu	Asp	Ala	Gln	Lys	Thr	Cys		
			20					25					30				

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 38
<211> 248

<212> PRT

<213> Homo sapiens

<400> 38

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu

210	215	220															
Leu	Leu	Lys	Asn	Gly	Gln	Trp	Asn	Asp	Val	Pro	Cys	Ser	Thr	Ser	His		
225					230					235					240		
Leu	Ala	Val	Cys	Glu	Phe	Pro	Ile										
				245													
<210> 39																	
<211> 652																	
<212> PRT																	
<213> Homo sapiens																	
<400> 39																	
Met	Ala	Thr	Ser	Met	Gly	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Thr		
1				5					10						15		
Gln	Pro	Gly	Ala	Gly	Thr	Gly	Ala	Asp	Thr	Glu	Ala	Val	Val	Cys	Val		
			20					25					30				
Gly	Thr	Ala	Cys	Tyr	Thr	Ala	His	Ser	Gly	Lys	Leu	Ser	Ala	Ala	Glu		
		35					40					45					
Ala	Gln	Asn	His	Cys	Asn	Gln	Asn	Gly	Gly	Asn	Leu	Ala	Thr	Val	Lys		
	50					55					60						
Ser	Lys	Glu	Glu	Ala	Gln	His	Val	Gln	Arg	Val	Leu	Ala	Gln	Leu	Leu		
65					70				75						80		
Arg	Arg	Glu	Ala	Ala	Leu	Thr	Ala	Arg	Met	Ser	Lys	Phe	Trp	Ile	Gly		
				85				90						95			
Leu	Gln	Arg	Glu	Lys	Gly	Lys	Cys	Leu	Asp	Pro	Ser	Leu	Pro	Leu	Lys		
			100					105					110				
Gly	Phe	Ser	Trp	Val	Gly	Gly	Gly	Glu	Asp	Thr	Pro	Tyr	Ser	Asn	Trp		
		115					120					125					
His	Lys	Glu	Leu	Arg	Asn	Ser	Cys	Ile	Ser	Lys	Arg	Cys	Val	Ser	Leu		
	130					135					140						
Leu	Leu	Asp	Leu	Ser	Gln	Pro	Leu	Leu	Pro	Asn	Arg	Leu	Pro	Lys	Trp		
145					150					155					160		

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Thr Pro Phe Gln Thr Thr
195 200 205

Ser Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Ala Ala Asn Val Ala
210 215 220

Cys Gly Glu Gly Asp Lys Asp Glu Thr Gln Ser His Tyr Phe Leu Cys
225 230 235 240

Lys Glu Lys Ala Pro Asp Val Phe Asp Trp Gly Ser Ser Gly Pro Leu
245 250 255

Cys Val Ser Pro Lys Tyr Gly Cys Asn Phe Asn Asn Gly Gly Cys His
260 265 270

Gln Asp Cys Phe Glu Gly Gly Asp Gly Ser Phe Leu Cys Gly Cys Arg
275 280 285

Pro Gly Phe Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn
290 295 300

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Ser Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 40
<211> 251
<212> PRT
<213> Danio rerio

<400> 40

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 41
<211> 118
<212> PRT
<213> Cyprinus carpio

<400> 41

Lys Ile Gln Thr Gly Ser Asn Thr Val Ser Ile Leu Phe His Ser Asp
1 5 10 15

Asn Ser Gly Asp Asn Leu Gly Trp Lys Leu Thr Tyr Thr Ser Thr Gly
20 25 30

Ser Glu Cys Ser Pro Leu Ala Ala Pro Leu Asn Gly His Leu Glu Pro
35 40 45

Leu Gln Ser Asn Tyr Ile Phe Lys Asp His Ile Met Leu Thr Cys Asp
50 55 60

Pro Gly Tyr Ser Leu Arg Gln Gly Asp Lys Glu Phe Glu His Tyr Gln
65 70 75 80

Ile Glu Cys Gln Arg Asp Gly Lys Trp Ser Ser Asp Val Pro Leu Cys
85 90 95

Lys Lys Lys Glu Ser Gln Arg Arg His Arg Ser Leu Pro Ser Ile Leu
100 105 110

Thr Asn Gln Ile Leu Ser
115

<210> 42
<211> 652
<212> PRT
<213> Homo sapiens

<400> 42

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
85 90 95

Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
100 105 110

Gly Phe Ser Trp Val Gly Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
115 120 125

His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
130 135 140

Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Ser Arg Leu Pro Lys Trp
145 150 155 160

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Thr Pro Phe Gln Thr Thr

195																	
Ser	Ser	Ser	Leu	Glu	Ala	Val	Pro	Phe	Ala	Ser	Ala	Ala	Asn	Val	Ala		
210						215					220						
Cys	Gly	Glu	Gly	Asp	Lys	Asp	Glu	Thr	Gln	Ser	His	Tyr	Phe	Leu	Cys		
225					230					235					240		
Lys	Glu	Lys	Ala	Pro	Asp	Val	Phe	Asp	Trp	Gly	Ser	Ser	Gly	Pro	Leu		
				245					250					255			
Cys	Val	Ser	Pro	Lys	Tyr	Gly	Cys	Asn	Phe	Asn	Asn	Gly	Gly	Cys	His		
			260					265					270				
Gln	Asp	Cys	Phe	Glu	Gly	Gly	Asp	Gly	Ser	Phe	Leu	Cys	Gly	Cys	Arg		
		275					280						285				
Pro	Gly	Phe	Arg	Leu	Leu	Asp	Asp	Leu	Val	Thr	Cys	Ala	Ser	Arg	Asn		
	290					295					300						
Pro	Cys	Ser	Ser	Ser	Pro	Cys	Arg	Gly	Gly	Ala	Thr	Cys	Val	Leu	Gly		
305					310					315					320		
Pro	His	Gly	Lys	Asn	Tyr	Thr	Cys	Arg	Cys	Pro	Gln	Gly	Tyr	Gln	Leu		
				325					330					335			
Asp	Ser	Ser	Gln	Leu	Asp	Cys	Val	Asp	Val	Asp	Glu	Cys	Gln	Asp	Ser		
			340					345					350				
Pro	Cys	Ala	Gln	Glu	Cys	Val	Asn	Thr	Pro	Gly	Gly	Phe	Arg	Cys	Glu		
		355					360					365					
Cys	Trp	Val	Gly	Tyr	Glu	Pro	Gly	Gly	Pro	Gly	Glu	Gly	Ala	Cys	Gln		
	370					375					380						
Asp	Val	Asp	Glu	Cys	Ala	Leu	Gly	Arg	Ser	Pro	Cys	Ala	Gln	Gly	Cys		
385					390					395					400		
Thr	Asn	Thr	Asp	Gly	Ser	Phe	His	Cys	Ser	Cys	Glu	Glu	Gly	Tyr	Val		
				405					410					415			
Leu	Ala	Gly	Glu	Asp	Gly	Thr	Gln	Cys	Gln	Asp	Val	Asp	Glu	Cys	Val		
			420					425					430				

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Pro Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 43

<211> 742
<212> PRT
<213> Mus musculus

<400> 43

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Asp Gly Met Glu Thr Ser His Gln Thr Tyr Asp
65 70 75 80

Asn Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Ala Gly Lys Lys Ala Leu Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Gln Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Asn Gly Asp
130 135 140

Ser Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Gln Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Ser Gln Met Tyr Ser Gln Ser Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Ser Asn Leu Gln
210 215 220

Gln Ser Val Asp Asp Thr Ser Leu Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Ser Ser Phe Thr Gly Gln Met Asp Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Ser Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Thr Glu Asn Arg Thr Ala Val Lys Phe Ser Gln Leu Glu Glu Arg Phe
325 330 335

Gln Val Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Asp Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Arg His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Val Asn Ile Arg Leu Asp Ser Ile Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Met Met Arg Ser Lys Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Val Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Met Glu Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Ser Glu Val Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Leu Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Ser Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

His Thr Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Gln Glu Ser Glu Trp Lys Trp Leu Asp Gly Ser Pro Val Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly Ser Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Asp Glu Ile Asn Asn Phe Ile Cys Glu Lys Glu Arg Glu Ala
725 730 735

Val Pro Ser Ser Ile Leu
740

<210> 44
<211> 321
<212> PRT
<213> Bos taurus

<400> 44

Met Leu Pro Leu Pro Leu Ser Ile Leu Leu Leu Leu Thr Gln Ser Gln
1 5 10 15

Ser Phe Leu Gly Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr
20 25 30

Asp Pro Cys Thr Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg
35 40 45

Gly His Asp Gly Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Pro Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro
65 70 75 80

Ser Gly Arg Gln Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys
85 90 95

Gly Glu Pro Gly Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly
100 105 110

Ser Pro Gly Pro Ala Gly Leu Lys Gly Glu Arg Gly Thr Pro Gly Pro
115 120 125

Gly Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro
130 135 140

Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly
145 150 155 160

Glu Thr Ser Val Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn
165 170 175

Leu Glu Gly Glu Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg
180 185 190

Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe
195 200 205

Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys
210 215 220

Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn
225 230 235 240

Glu Ala Val Thr Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu
245 250 255

Ser Met Asn Asp Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly
260 265 270

Gly Ser Leu Asp Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg
275 280 285

Ala Lys Asp Glu Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly
290 295 300

Asn Trp Asn Asp Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu
305 310 315 320

Phe

<210> 45
<211> 371
<212> PRT
<213> Bos taurus

<400> 45

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Leu Ala
20 25 30

Asn Gly Cys Thr Leu Val Val Cys Arg Pro Pro Glu Gly Gly Leu Pro
35 40 45

Gly Arg Asp Gly Gln Asp Gly Arg Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Met
130 135 140

Gly Ala Pro Gly Met Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Leu Gly Ala Pro Gly Ser Ala Gly Val
165 170 175

Ala Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Asp Val Asn Ala Leu Lys Gln Arg
210 215 220

Val Thr Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Arg Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Lys
245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Gln
260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ala
275 280 285

Ala Glu Asn Glu Ala Val Ala Gln Leu Val Arg Ala Lys Asn Asn Asp
290 295 300

Ala Phe Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Lys Phe Thr Tyr
305 310 315 320

Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn Trp Ala Ser Gly Glu Pro
325 330 335

Asn Asn Asn Asn Ala Gly Gln Pro Glu Asn Cys Val Gln Ile Tyr Arg
340 345 350

Glu Gly Lys Trp Asn Asp Val Pro Cys Ser Glu Pro Leu Leu Val Ile
355 360 365

Cys Glu Phe
370

<210> 46
<211> 272
<212> PRT
<213> Mus musculus

<400> 46

Met Met Met Arg Asp Leu Ala Leu Ala Gly Met Leu Ile Ser Leu Ala
1 5 10 15

Phe Leu Ser Leu Leu Pro Ser Gly Cys Pro Gln Gln Thr Thr Glu Asp
20 25 30

Ala Cys Ser Val Gln Ile Leu Val Pro Gly Leu Lys Gly Asp Ala Gly
35 40 45

Glu Lys Gly Asp Lys Gly Ala Pro Gly Arg Pro Gly Arg Val Gly Pro
50 55 60

Thr Gly Glu Lys Gly Asp Met Gly Asp Lys Gly Gln Lys Gly Thr Val
65 70 75 80

Gly Arg His Gly Lys Ile Gly Pro Ile Gly Ala Lys Gly Glu Lys Gly
85 90 95

Asp Ser Gly Asp Ile Gly Pro Pro Gly Pro Ser Gly Glu Pro Gly Ile
100 105 110

Pro Cys Glu Cys Ser Gln Leu Arg Lys Ala Ile Gly Glu Met Asp Asn
115 120 125

Gln Val Thr Gln Leu Thr Thr Glu Leu Lys Phe Ile Lys Asn Ala Val
130 135 140

Ala Gly Val Arg Glu Thr Glu Ser Lys Ile Tyr Leu Leu Val Lys Glu
145 150 155 160

Glu Lys Arg Tyr Ala Asp Ala Gln Leu Ser Cys Gln Ala Arg Gly Gly
165 170 175

Thr Leu Ser Met Pro Lys Asp Glu Ala Ala Asn Gly Leu Met Ala Ser
180 185 190

Tyr Leu Ala Gln Ala Gly Leu Ala Arg Val Phe Ile Gly Ile Asn Asp
195 200 205

Leu Glu Lys Glu Gly Ala Phe Val Tyr Ser Asp Arg Ser Pro Met Gln
210 215 220

Thr Phe Asn Lys Trp Arg Ser Gly Glu Pro Asn Asn Ala Tyr Asp Glu
225 230 235 240

Glu Asp Cys Val Glu Met Val Ala Ser Gly Gly Trp Asn Asp Val Ala
245 250 255

Cys His Ile Thr Met Tyr Phe Met Cys Glu Phe Asp Lys Glu Asn Leu
260 265 270

<210> 47

<211> 420
<212> PRT
<213> Mus musculus

<400> 47

Met Asn Gly Phe Arg Val Leu Leu Arg Ser Asn Leu Ser Met Leu Leu
1 5 10 15

Leu Leu Ala Leu Leu His Phe Gln Ser Leu Gly Leu Asp Val Asp Ser
20 25 30

Arg Ser Ala Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
35 40 45

Lys Gly Asp Asp Gly Glu Arg Gly Asp Thr Gly Glu Glu Gly Lys Asp
50 55 60

Gly Lys Val Gly Arg Gln Gly Pro Lys Gly Val Lys Gly Glu Leu Gly
65 70 75 80

Asp Met Gly Ala Gln Gly Asn Ile Gly Lys Ser Gly Pro Ile Gly Lys
85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
100 105 110

Gly Lys Ala Gly Thr Ile Cys Asp Cys Gly Arg Tyr Arg Lys Val Val
115 120 125

Gly Gln Leu Asp Ile Ser Val Ala Arg Leu Lys Thr Ser Met Lys Phe
130 135 140

Ile Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Val Val Asn
180 185 190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe
195 200 205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Val Phe Thr Asp
210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Lys Glu Glu Glu Pro Ser
225 230 235 240

Asp Pro Ser Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Ser Ser Leu
260 265 270

Gln Glu Asp Leu Ile Glu Asp Cys Leu Arg Glu Gln Gly Leu Leu Val
275 280 285

Gln Val Thr Pro Ala Asn Gln Glu Leu Leu Phe Gly Ile Asp Thr Phe
290 295 300

Leu Gly Pro Met Ser Cys Val Tyr Gln Arg Thr Gly Thr Lys Gln Lys
305 310 315 320

Leu Tyr Ser Gln Cys Arg Leu Trp Asp Gly Leu Ala Lys Lys Gln Thr
325 330 335

Asn Glu Thr Ala Asn Ile Ala Thr Phe Cys Lys Gly Ala Glu Pro Asn
340 345 350

Arg Gly Ser Arg Pro Cys Gly Gln Lys Gln Glu Met Met Thr Leu Met
355 360 365

Met Ser Gly Asn Lys Gly Ile Thr Thr Phe Pro Glu Ser Asp Asn Leu
370 375 380

Phe Lys Trp Val Gly Thr Met Leu Gly Ala Ala Gly Thr Ile Asp Glu
385 390 395 400

Asp Leu Lys Tyr Lys Leu Ser Leu Asn Ser Pro Val Val Thr Leu Ile
405 410 415

Ile His Pro Gln
420

<210> 48
<211> 742

<212> PRT

<213> Mus musculus

<400> 48

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Asp Gly Met Glu Thr Ser His Gln Thr Tyr Asp
65 70 75 80

Asn Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Ala Gly Lys Lys Ala Leu Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Gln Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Asn Gly Asp
130 135 140

Ser Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Gln Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Ser Gln Met Tyr Ser Gln Ser Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Ser Asn Leu Gln

210						215										220
Gln	Ser	Val	Asp	Asp	Thr	Ser	Leu	Ala	Ile	Gln	Arg	Ile	Lys	Asn	Asp	
225					230					235					240	
Phe	Gln	Asn	Leu	Gln	Gln	Val	Phe	Leu	Gln	Ala	Lys	Lys	Asp	Thr	Asp	
			245						250					255		
Trp	Leu	Lys	Glu	Lys	Val	Gln	Ser	Leu	Gln	Thr	Leu	Ala	Ala	Asn	Asn	
			260					265						270		
Ser	Ala	Leu	Ala	Lys	Ala	Asn	Asn	Asp	Thr	Leu	Glu	Asp	Met	Asn	Ser	
		275						280					285			
Gln	Leu	Ser	Ser	Phe	Thr	Gly	Gln	Met	Asp	Asn	Ile	Thr	Thr	Ile	Ser	
	290					295					300					
Gln	Ala	Asn	Glu	Gln	Ser	Leu	Lys	Asp	Leu	Gln	Asp	Leu	His	Lys	Asp	
305					310					315					320	
Thr	Glu	Asn	Arg	Thr	Ala	Val	Lys	Phe	Ser	Gln	Leu	Glu	Glu	Arg	Phe	
				325					330					335		
Gln	Val	Phe	Glu	Thr	Asp	Ile	Val	Asn	Ile	Ile	Ser	Asn	Ile	Ser	Tyr	
			340					345					350			
Thr	Ala	His	His	Leu	Arg	Thr	Leu	Thr	Ser	Asn	Leu	Asn	Asp	Val	Arg	
		355					360					365				
Thr	Thr	Cys	Thr	Asp	Thr	Leu	Thr	Arg	His	Thr	Asp	Asp	Leu	Thr	Ser	
	370					375					380					
Leu	Asn	Asn	Thr	Leu	Val	Asn	Ile	Arg	Leu	Asp	Ser	Ile	Ser	Leu	Arg	
385					390					395					400	
Met	Gln	Gln	Asp	Met	Met	Arg	Ser	Lys	Leu	Asp	Thr	Glu	Val	Ala	Asn	
				405					410					415		
Leu	Ser	Val	Val	Met	Glu	Glu	Met	Lys	Leu	Val	Asp	Ser	Lys	His	Gly	
			420					425					430			
Gln	Leu	Ile	Lys	Asn	Phe	Thr	Ile	Leu	Gln	Gly	Pro	Pro	Gly	Pro	Arg	
		435					440					445				

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Met Glu Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Ser Glu Val Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Leu Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Ser Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

His Thr Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Gln Glu Ser Glu Trp Lys Trp Leu Asp Gly Ser Pro Val Asp Tyr Lys

675

680

685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly Ser Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Asp Glu Ile Asn Asn Phe Ile Cys Glu Lys Glu Arg Glu Ala
725 730 735

Val Pro Ser Ser Ile Leu
740

<210> 49
<211> 251
<212> PRT
<213> Danio rerio

<400> 49

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 50
<211> 742
<212> PRT
<213> Homo sapiens

<400> 50

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp

305				310				315				320				
Ala	Glu	Asn	Arg	Thr	Ala	Ile	Lys	Phe	Asn	Gln	Leu	Glu	Glu	Arg	Phe	
				325					330					335		
Gln	Leu	Phe	Glu	Thr	Asp	Ile	Val	Asn	Ile	Ile	Ser	Asn	Ile	Ser	Tyr	
				340					345					350		
Thr	Ala	His	His	Leu	Arg	Thr	Leu	Thr	Ser	Asn	Leu	Asn	Glu	Val	Arg	
				355					360					365		
Thr	Thr	Cys	Thr	Asp	Thr	Leu	Thr	Lys	His	Thr	Asp	Asp	Leu	Thr	Ser	
				370					375					380		
Leu	Asn	Asn	Thr	Leu	Ala	Asn	Ile	Arg	Leu	Asp	Ser	Val	Ser	Leu	Arg	
385								390					395	400		
Met	Gln	Gln	Asp	Leu	Met	Arg	Ser	Arg	Leu	Asp	Thr	Glu	Val	Ala	Asn	
				405					410					415		
Leu	Ser	Val	Ile	Met	Glu	Glu	Met	Lys	Leu	Val	Asp	Ser	Lys	His	Gly	
				420					425					430		
Gln	Leu	Ile	Lys	Asn	Phe	Thr	Ile	Leu	Gln	Gly	Pro	Pro	Gly	Pro	Arg	
				435					440					445		
Gly	Pro	Arg	Gly	Asp	Arg	Gly	Ser	Gln	Gly	Pro	Pro	Gly	Pro	Thr	Gly	
				450					455					460		
Asn	Lys	Gly	Gln	Lys	Gly	Glu	Lys	Gly	Glu	Pro	Gly	Pro	Pro	Gly	Pro	
465								470					475	480		
Ala	Gly	Glu	Arg	Gly	Pro	Ile	Gly	Pro	Ala	Gly	Pro	Pro	Gly	Glu	Arg	
				485					490					495		
Gly	Gly	Lys	Gly	Ser	Lys	Gly	Ser	Gln	Gly	Pro	Lys	Gly	Ser	Arg	Gly	
				500					505					510		
Ser	Pro	Gly	Lys	Pro	Gly	Pro	Gln	Gly	Pro	Ser	Gly	Asp	Pro	Gly	Pro	
				515					520					525		
Pro	Gly	Pro	Pro	Gly	Lys	Glu	Gly	Leu	Pro	Gly	Pro	Gln	Gly	Pro	Pro	
				530					535					540		

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Val Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr
725 730 735

Val Leu Ser Ser Ala Leu
740

<210> 51
<211> 622
<212> PRT
<213> Homo sapiens

<400> 51

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Ala Glu Asn Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe
325 330 335

Gln Leu Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg
485 490 495

Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Ser Lys Ser
595 600 605

Lys Pro Ser Leu Gln Pro Gly Gly Gln Gly Ser Ala Cys Ala
610 615 620

<210> 52
<211> 742
<212> PRT
<213> Mus musculus

<400> 52

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile His Glu Gly Thr Gln Cys Thr Lys Cys Ile Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala

35					40					45					
Leu	Leu	Thr	Ile	Thr	Val	Ala	Ile	Leu	Gly	Tyr	Lys	Val	Val	Glu	Lys
50						55					60				
Met	Asp	Asn	Val	Ser	Asp	Gly	Met	Glu	Thr	Ser	His	Gln	Thr	Tyr	Asp
65					70					75					80
Asn	Lys	Leu	Thr	Ala	Val	Glu	Ser	Asp	Leu	Lys	Lys	Leu	Gly	Asp	Gln
				85					90					95	
Ala	Gly	Lys	Lys	Ala	Leu	Ser	Thr	Asn	Ser	Glu	Leu	Ser	Thr	Phe	Arg
			100					105					110		
Ser	Asp	Ile	Leu	Asp	Leu	Arg	Gln	Gln	Leu	Gln	Glu	Ile	Thr	Glu	Lys
		115					120						125		
Thr	Ser	Lys	Asn	Lys	Asp	Thr	Leu	Glu	Lys	Leu	Gln	Ala	Asn	Gly	Asp
	130					135					140				
Ser	Leu	Val	Asp	Arg	Gln	Ser	Gln	Leu	Lys	Glu	Thr	Leu	Gln	Asn	Asn
145					150					155					160
Ser	Phe	Leu	Ile	Thr	Thr	Val	Asn	Lys	Thr	Leu	Gln	Ala	Tyr	Asn	Gly
			165						170					175	
Tyr	Val	Thr	Asn	Leu	Gln	Gln	Asp	Thr	Asn	Val	Leu	Gln	Gly	Asn	Leu
			180					185					190		
Gln	Ser	Gln	Met	Tyr	Ser	Gln	Ser	Val	Val	Ile	Met	Asn	Leu	Asn	Asn
		195					200					205			
Leu	Asn	Leu	Thr	Gln	Val	Gln	Gln	Arg	Asn	Leu	Ile	Ser	Asn	Leu	Gln
	210					215					220				
Gln	Ser	Val	Asp	Asp	Thr	Ser	Leu	Ala	Ile	Gln	Arg	Ile	Lys	Asn	Asp
225					230					235					240
Phe	Gln	Asn	Leu	Gln	Gln	Val	Phe	Leu	Gln	Ala	Lys	Lys	Asp	Thr	Asp
				245					250					255	
Trp	Leu	Lys	Glu	Lys	Val	Gln	Ser	Leu	Gln	Thr	Leu	Ala	Ala	Asn	Asn
			260					265						270	

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Ser Ser Phe Thr Gly Gln Met Asp Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Ser Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Thr Glu Asn Arg Thr Ala Val Lys Phe Ser Gln Leu Glu Glu Arg Phe
325 330 335

Gln Val Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Asp Val Trp
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Arg His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Val Asn Ile Arg Leu Asp Ser Ile Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Met Met Arg Ser Lys Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Val Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly

500							505							510						
Ser	Pro	Gly	Lys	Pro	Gly	Pro	Gln	Gly	Pro	Ser	Gly	Asp	Pro	Gly	Pro					
		515						520				525								
Pro	Gly	Pro	Pro	Gly	Lys	Asp	Gly	Leu	Pro	Gly	Pro	Gln	Gly	Pro	Pro					
	530					535					540									
Gly	Phe	Gln	Gly	Leu	Gln	Gly	Thr	Val	Gly	Glu	Pro	Gly	Val	Pro	Gly					
545					550					555					560					
Pro	Arg	Gly	Leu	Pro	Gly	Leu	Pro	Gly	Val	Pro	Gly	Met	Pro	Gly	Pro					
				565					570					575						
Lys	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Ser	Gly	Ala	Met	Glu	Pro	Leu					
			580					585					590							
Ala	Leu	Gln	Asn	Glu	Pro	Thr	Pro	Ala	Ser	Glu	Val	Asn	Gly	Cys	Pro					
		595						600					605							
Pro	His	Trp	Lys	Asn	Phe	Thr	Asp	Lys	Cys	Tyr	Tyr	Phe	Ser	Leu	Glu					
	610					615						620								
Lys	Glu	Ile	Leu	Glu	Asp	Ala	Lys	Leu	Phe	Cys	Glu	Asp	Lys	Ser	Ser					
625					630					635					640					
His	Leu	Val	Phe	Ile	Asn	Ser	Arg	Glu	Glu	Gln	Gln	Trp	Ile	Lys	Lys					
				645					650					655						
His	Thr	Val	Gly	Arg	Glu	Ser	His	Trp	Ile	Gly	Leu	Thr	Asp	Ser	Glu					
			660					665					670							
Gln	Glu	Ser	Glu	Trp	Lys	Trp	Leu	Asp	Gly	Ser	Pro	Val	Asp	Tyr	Lys					
		675						680				685								
Asn	Trp	Lys	Ala	Gly	Gln	Pro	Asp	Asn	Trp	Gly	Ser	Gly	His	Gly	Pro					
	690					695					700									
Gly	Glu	Asp	Cys	Ala	Gly	Leu	Ile	Tyr	Ala	Gly	Gln	Trp	Asn	Asp	Phe					
705					710					715					720					
Gln	Cys	Asp	Glu	Ile	Asn	Asn	Phe	Ile	Cys	Glu	Lys	Glu	Arg	Glu	Ala					
				725					730					735						

Val Pro Ser Ser Ile Leu
740

<210> 53
<211> 321
<212> PRT
<213> Bos taurus

<400> 53

Met Leu Pro Leu Pro Leu Ser Ile Leu Leu Leu Leu Thr Gln Ser Gln
1 5 10 15

Ser Phe Leu Gly Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr
20 25 30

Asp Pro Cys Thr Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg
35 40 45

Gly His Asp Gly Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Pro Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro
65 70 75 80

Ser Gly Arg Gln Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys
85 90 95

Gly Glu Pro Gly Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly
100 105 110

Ser Pro Gly Pro Ala Gly Leu Lys Gly Glu Arg Gly Thr Pro Gly Pro
115 120 125

Gly Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro
130 135 140

Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly
145 150 155 160

Glu Thr Ser Val Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn
165 170 175

Leu Glu Gly Glu Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg
180 185 190

Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe
195 200 205

Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys
210 215 220

Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn
225 230 235 240

Glu Ala Val Thr Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu
245 250 255

Ser Met Asn Asp Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly
260 265 270

Gly Ser Leu Asp Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg
275 280 285

Ala Lys Asp Glu Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly
290 295 300

Asn Trp Asn Asp Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu
305 310 315 320

Phe

<210> 54
<211> 239
<212> PRT
<213> Mus musculus

<400> 54

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys

50

55

60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 55

<211> 244

<212> PRT

<213> Mus musculus

<400> 55

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 56
<211> 277
<212> PRT
<213> Homo sapiens

<400> 56

Met Asn Gly Phe Ala Ser Leu Leu Arg Arg Asn Gln Phe Ile Leu Leu
1 5 10 15

Val Leu Phe Leu Leu Gln Ile Gln Ser Leu Gly Leu Asp Ile Asp Ser
20 25 30

Arg Pro Thr Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
35 40 45

Lys Gly Asp Asp Gly Glu Lys Gly Asp Pro Gly Glu Glu Gly Lys His
50 55 60

Gly Lys Val Gly Arg Met Gly Pro Lys Gly Ile Lys Gly Glu Leu Gly
65 70 75 80

Asp Met Gly Asp Arg Gly Asn Ile Gly Lys Thr Gly Pro Ile Gly Lys
85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
100 105 110

Gly Lys Ala Gly Thr Val Cys Asp Cys Gly Arg Tyr Arg Lys Phe Val
115 120 125

Gly Gln Leu Asp Ile Ser Ile Ala Arg Leu Lys Thr Ser Met Lys Phe
130 135 140

Val Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn
180 185 190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe

195

200

205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Phe Thr Asp
 210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
 225 230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
 245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys Glu Phe
 260 265 270

Ile Lys Lys Lys Lys
 275

<210> 57
 <211> 742
 <212> PRT
 <213> Homo sapiens

<400> 57

Met Lys Asp Asp Phe Ala Glu Glu Glu Glu Val Gln Ser Phe Gly Tyr
 1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
 20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
 35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
 50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
 65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
 85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
 100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Ala Glu Asn Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe
325 330 335

Gln Leu Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg
485 490 495

Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Val Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr
725 730 735

Val Leu Ser Ser Ala Leu
740

<210> 58
<211> 246
<212> PRT
<213> Carassius auratus

<400> 58

Leu Leu Leu Leu Gln Phe Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro
1 5 10 15

Gln Asn Leu Asn Cys Pro Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly
20 25 30

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala
35 40 45

Ile Gly Pro Lys Gly Glu Lys Gly Glu Ser Gly Val Ser Val Gln Gly
50 55 60

Pro Pro Gly Lys Ala Gly Pro Pro Gly Thr Ala Gly Glu Lys Gly Glu
65 70 75 80

Arg Gly Pro Ser Gly Pro Gln Gly Ser Pro Gly Ser Glu Ser Val Leu
85 90 95

Glu Ser Leu Lys Ser Glu Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr
100 105 110

Phe Glu Lys Val Ser Ser Val Cys His Phe Arg Lys Val Gly Gln Lys
115 120 125

Tyr Tyr Ile Thr Asp Gly Val Val Gly Asn Phe Asp Gln Gly Leu Lys
130 135 140

Ser Cys Met Glu Phe Gly Gly Thr Met Val Ser Pro Arg Thr Ser Ala
145 150 155 160

Glu Asn Gln Ala Leu Leu Lys Leu Val Val Ser Ser Gly Leu Gly Ser
165 170 175

Lys Lys Pro Tyr Ile Gly Val Thr Asp Arg Lys Thr Glu Gly Gln Phe
180 185 190

Val Asp Thr Glu Gly Lys Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly
195 200 205

Gln Pro Asp Asp Tyr Lys Gly Leu Gln Asp Cys Gly Val Ile Glu Asp
210 215 220

Thr Gly Leu Trp Asp Asp Gly Gly Cys Gly Asp Ile Arg Pro Ile Met
225 230 235 240

Cys Glu Ile Asp Ile Lys
245

<210> 59

<211> 251
<212> PRT
<213> Danio rerio

<400> 59

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 60
<211> 256
<212> PRT
<213> Cyprinus carpio

<400> 60

Met Ala Leu Phe Lys Leu Phe Leu Gly Thr Leu Leu Leu Leu Gln Phe
1 5 10 15

Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro Gln Asn Leu Asn Cys Pro
20 25 30

Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala Ile Gly Pro Lys Gly Glu
50 55 60

Lys Gly Glu Ser Gly Val Ser Val Gln Gly Pro Pro Gly Lys Ala Gly
65 70 75 80

Pro Pro Gly Pro Ala Gly Glu Lys Gly Glu Arg Gly Pro Thr Gly Ser
85 90 95

Gln Gly Ser Pro Gly Ser Glu Ser Val Leu Glu Ser Leu Lys Ser Glu
100 105 110

Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr Phe Glu Lys Val Ala Ser
115 120 125

Val Gly His Phe Arg Gln Val Gly Gln Lys Tyr Tyr Ile Thr Asp Gly
130 135 140

Val Val Gly Thr Phe Asp Gln Gly Leu Lys Phe Cys Lys Asp Phe Gly
145 150 155 160

Gly Thr Met Val Phe Pro Arg Thr Ser Ala Glu Asn Gln Ala Leu Leu
165 170 175

Lys Leu Val Val Ser Ser Gly Leu Ser Ser Lys Lys Pro Tyr Ile Gly
180 185 190

Val Thr Asp Arg Glu Thr Glu Gly Arg Phe Val Asn Thr Glu Gly Lys
195 200 205

Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly Gln Pro Asp Asp Tyr Lys
210 215 220

Gly Leu Gln Asp Cys Gly Val Ile Glu Asp Ser Gly Leu Trp Asp Asp
225 230 235 240

Gly Ser Cys Gly Asp Ile Arg Pro Ile Met Cys Glu Ile Asp Asn Lys
245 250 255

<210> 61

<211> 222

<212> PRT

<213> Gallus gallus

<400> 61

Met Leu Ser Tyr Ser Phe Cys Met Ile Ala Ala Ala Val Ala Leu Leu
1 5 10 15

Thr Pro Cys His Ala Gln Asn Cys Ala Gly Ala Pro Glu Leu Pro Ser
20 25 30

Ile Pro Gly Val Ser Gly Leu Leu Gly Leu Gly Ala Leu Lys Arg Tyr
35 40 45

Phe Gly Ser Leu Leu Trp Pro Tyr Gly Glu Glu Lys Leu Pro Glu Cys
50 55 60

Gln Trp Leu Gln Arg Gln Gln Asp Leu Ser Thr Ser Ser Asp Asp Glu
65 70 75 80

Leu Gly Asn Val Leu Leu Asn Leu Arg Gln Arg Ile Leu Gln Leu Glu
85 90 95

Gly Val Leu Ala Leu Asp Gly Lys Ile Thr Lys Val Gly Glu Lys Ile
100 105 110

Phe Ala Ser Asn Gly Lys Glu Val Asn Phe Ser Ser Ala Leu Glu Ser
115 120 125

Cys Glu Glu Thr Gly Gly Thr Leu Ala Thr Pro Met Asn Glu Glu Glu
130 135 140

Asn Lys Ala Ile Met Gly Ile Val Lys Gln Tyr Asn Arg Tyr Ala Tyr
145 150 155 160

Leu Gly Ile Lys Glu Ser Asp Thr Ala Gly Gln Phe Lys Tyr Val Asn
165 170 175

Asn Gln Pro Leu Asn Tyr Thr Ser Trp Gln Gln Tyr Glu Pro Asn Gly
180 185 190

Lys Gly Thr Glu Lys Cys Val Glu Met Tyr Thr Asp Gly Asn Trp Lys
195 200 205

Asp Arg Lys Cys Asn Leu Tyr Arg Leu Thr Val Cys Glu Tyr
210 215 220

<210> 62
<211> 371
<212> PRT
<213> Bos taurus

<400> 62

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Thr Thr Phe Ser Gln Lys Ile Leu Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Leu Glu Ser Gly Leu Pro
35 40 45

Gly His Asp Gly Gln Asp Gly Arg Glu Cys Pro His Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Trp
65 70 75 80

Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val Gly Glu Pro

85

90

95

Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly Met Pro Gly
 100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
 115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys Gly Gly Val
 130 135 140

Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly Leu Lys Gly
 145 150 155 160

Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg Ala Gly Val
 165 170 175

Thr Gly Pro Ser Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
 180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Thr Gly
 195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Lys Gln Arg
 210 215 220

Val Thr Ile Leu Asp Gly His Leu Arg Arg Phe Gln Asn Ala Phe Ser
 225 230 235 240

Gln Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu
 245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu
 260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser
 275 280 285

Ala Glu Asn Glu Ala Val Thr Gln Met Val Arg Ala Gln Glu Lys Asn
 290 295 300

Ala Tyr Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Arg Phe Thr Tyr
 305 310 315 320

Pro Thr Gly Glu Ile Leu Val Tyr Ser Asn Trp Ala Asp Gly Glu Pro
325 330 335

Asn Asn Ser Asp Glu Gly Gln Pro Glu Asn Cys Val Glu Ile Phe Pro
340 345 350

Asp Gly Lys Trp Asn Asp Val Pro Cys Ser Lys Gln Leu Leu Val Ile
355 360 365

Cys Glu Phe
370

<210> 63
<211> 30
<212> PRT
<213> Gallus gallus

<400> 63

Leu Leu Thr Cys Asp Lys Pro Glu Glu Lys Met Tyr Ser Cys Pro Ile
1 5 10 15

Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu Pro Gly Asp
20 25 30

<210> 64
<211> 301
<212> PRT
<213> Bos taurus

<400> 64

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 65

<211> 116
<212> PRT
<213> Sus scrofa

<400> 65

Ala Val Gly Glu Lys Val Phe Ser Thr Asn Gly Gln Ser Val Ala Phe
1 5 10 15

Asp Val Ile Arg Glu Leu Cys Ala Arg Ala Gly Gly Arg Ile Ala Ala
20 25 30

Pro Arg Ser Pro Glu Glu Asn Glu Ala Ile Ala Ser Ile Val Lys Lys
35 40 45

His Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Gly Pro Thr Ala Gly
50 55 60

Asp Phe Phe Tyr Leu Asp Gly Thr Pro Val Asn Tyr Thr Asn Trp Tyr
65 70 75 80

Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Lys Cys Val Glu Met Tyr
85 90 95

Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Gln Gln Tyr Arg Leu Ala
100 105 110

Ile Cys Glu Phe
115

<210> 66
<211> 378
<212> PRT
<213> Sus scrofa

<400> 66

Met Leu Leu Leu Pro Leu Ser Val Leu Ile Leu Leu Thr Gln Pro Pro
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Thr Tyr Ser Gln Arg Ala Val Ala
20 25 30

Asn Ala Cys Ala Leu Val Met Cys Ser Pro Met Glu Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly

50

55

60

Asp Pro Gly Leu Pro Gly Ala Val Gly Arg Ala Gly Met Pro Gly Leu
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Thr Gly Glu Pro
85 90 95

Gly Ala Lys Gly Asp Ile Gly Pro Cys Gly Pro Pro Gly Pro Pro Gly
100 105 110

Ile Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Gln Gln Gly Asn
115 120 125

Ile Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Leu Gly Met Gln Gly Ser Thr Gly Ala Arg Gly
145 150 155 160

Pro Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Glu Arg Gly Ala
165 170 175

Pro Gly Ser Ala Gly Ala Ala Gly Pro Ala Gly Ala Thr Gly Pro Gln
180 185 190

Gly Pro Ser Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly
195 200 205

Pro Pro Gly Glu Arg Gly Ala Lys Gly Glu Ser Gly Leu Pro Gly Ile
210 215 220

Thr Ala Leu Arg Gln Gln Val Glu Thr Leu Gln Gly Gln Val Gln Arg
225 230 235 240

Leu Gln Lys Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Arg Gly Val Gly Glu Lys Ile Phe Lys Thr Gly Gly Phe Glu Lys
260 265 270

Thr Phe Gln Asp Ala Gln Gln Val Cys Thr Gln Ala Gly Gly Gln Met
275 280 285

Ala Ser Pro Arg Ser Glu Thr Glu Asn Glu Ala Leu Ser Gln Leu Val
290 295 300

Thr Ala Gln Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Ile Lys Thr
305 310 315 320

Glu Gly Asn Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ala Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ser Ser Gly Ala Glu
340 345 350

Asn Cys Val Glu Ile Phe Pro Asn Gly Lys Trp Asn Asp Lys Ala Cys
355 360 365

Gly Glu Leu Arg Leu Val Ile Cys Glu Phe
370 375

<210> 67
<211> 244
<212> PRT
<213> Mus musculus

<400> 67

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 68
<211> 239
<212> PRT
<213> Mus musculus

<400> 68

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys

50

55

60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 69

<211> 301

<212> PRT

<213> Bos taurus

<400> 69

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
 20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
 35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
 50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
 65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
 85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
 100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
 115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
 130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
 145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
 165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
 180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
 195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
 210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
 225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
 245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 70
<211> 2412
<212> PRT
<213> Homo sapiens

<400> 70

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Thr Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Ala Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly

145		150		155		160
Ser Gly Pro Ile	Ala 165	Leu Asp Asp Val	Arg 170	Cys Ser Gly His	Glu 175	Ser
Tyr Leu Trp Ser	Cys 180	Pro His Asn Gly	185	Trp Leu Ser His	Asn 190	Cys Gly
His Gly Glu Asp	Ala 195	Gly Val Ile Cys	Ser 200	Ala Ala Gln Pro	Gln 205	Ser
Thr Leu Arg Pro	Glu Ser	Trp 215	Pro Val Arg Ile	Ser 220	Pro Pro Val	Pro
Thr Glu Gly Ser	Glu Ser	230	Ser Leu Ala Leu	Arg 235	Leu Val Asn Gly	Gly 240
Asp Arg Cys Arg	Gly 245	Arg Val Glu Val	Leu 250	Tyr Arg Gly Ser	Trp 255	Gly
Thr Val Cys Asp	Asp Tyr	Trp 260	Asp Thr Asn Asp	Ala Asn	Val 270	Val Cys
Arg Gln Leu Gly	Cys Gly	Trp 275	Ala Met Ser Ala	Pro Gly	Asn 285	Ala Gln
Phe Gly Gln Gly	Ser Gly	Pro 295	Ile Val Leu Asp	Asp 300	Val Arg Cys Ser	
Gly His Glu Ser	Tyr Leu	Trp 310	Ser Cys Pro His	Asn 315	Gly Trp Leu	Thr 320
His Asn Cys Gly	His 325	Ser Glu Asp Ala	Gly 330	Val Ile Cys Ser	Ala 335	Pro
Gln Ser Arg Pro	Thr Pro	Ser 340	Pro Asp Thr	Trp Pro	Thr 350	Ser His Ala
Ser Thr Ala Gly	Pro Glu	Ser 355	Ser Leu Ala Leu	Arg 365	Leu Val Asn Gly	
Gly Asp Arg Cys	Gln Gly	Arg 375	Val Glu Val Leu	Tyr 380	Arg Gly Ser Trp	

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly

610					615					620					
Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys
625					630					635					640
Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg
				645					650					655	
Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser
			660					665					670		
Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	Asn	Asn	Gly	Trp	Leu	Ser
		675					680					685			
His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala
	690					695					700				
Gln	Ser	Arg	Ser	Thr	Pro	Arg	Pro	Asp	Thr	Leu	Ser	Thr	Ile	Thr	Leu
705					710					715					720
Pro	Pro	Ser	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu	Thr	Leu	Arg	Leu	Val
				725					730					735	
Asn	Gly	Ser	Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly
			740					745					750		
Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn
		755					760					765			
Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly
	770					775					780				
Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val
785					790					795					800
Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly
				805					810					815	
Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys
			820					825					830		
Ser	Val	Ser	Gln	Ser	Arg	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr
		835					840					845			

Ser His Ala Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu
 850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
 885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
 900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
 930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
 945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
 965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
 980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
 995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
 1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
 1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
 1040 1045 1050

Pro Ile Val Leu Asp Asp Ala Arg Cys Ser Gly His Glu Ser Tyr
 1055 1060 1065

Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly

1070		1075		1080
His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg	1085	1090	1095	
Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr	1100	1105	1110	
Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly	1115	1120	1125	
Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp	1130	1135	1140	
Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val	1145	1150	1155	
Ala Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly	1160	1165	1170	
Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp	1175	1180	1185	
Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His	1190	1195	1200	
Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly	1205	1210	1215	
Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp	1220	1225	1230	
Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser	1235	1240	1245	
Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg	1250	1255	1260	
Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp	1265	1270	1275	
Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly	1280	1285	1290	

Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln
1295						1300					1305			
Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His
1310						1315					1320			
Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His
1325						1330					1335			
Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser
1340						1345					1350			
Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	His
1355						1360					1365			
Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val
1370						1375					1380			
Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg
1385						1390					1395			
Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp
1400						1405					1410			
Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Thr	Ser
1415						1420					1425			
Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val
1430						1435					1440			
Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser
1445						1450					1455			
Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu
1460						1465					1470			
Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Phe	Gln	Ser	Gln	Pro	Thr	Pro
1475						1480					1485			
Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	Arg	Ala	Ser	Thr	Ala	Gly	Ser
1490						1495					1500			
Glu	Ser	Thr	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys

1505		1510		1515
Arg Gly 1520	Arg Val Glu Val	Leu Tyr Gln Gly Ser 1525	Trp Gly Thr Val 1530	
Cys Asp 1535	Asp Tyr Trp Asp	Thr Asn Asp Ala Asn 1540	Val Val Cys Arg 1545	
Gln Leu 1550	Gly Cys Gly Trp	Ala Met Ser Ala Pro 1555	Gly Asn Ala Gln 1560	
Phe Gly 1565	Gln Gly Ser Gly	Pro Ile Val Leu Asp 1570	Asp Val Arg Cys 1575	
Ser Gly 1580	His Glu Pro Tyr	Leu Trp Ser Cys Pro 1585	His Asn Gly Trp 1590	
Leu Ser 1595	His Asn Cys Gly	His His Glu Asp Ala 1600	Gly Val Ile Cys 1605	
Ser Ala 1610	Ala Gln Ser Gln	Ser Thr Pro Arg Pro 1615	Asp Thr Trp Leu 1620	
Thr Thr 1625	Asn Leu Pro Ala	Leu Thr Val Gly Ser 1630	Glu Ser Ser Leu 1635	
Ala Leu 1640	Arg Leu Val Asn	Gly Gly Asp Arg Cys 1645	Arg Gly Arg Val 1650	
Glu Val 1655	Leu Tyr Arg Gly	Ser Trp Gly Thr Val 1660	Cys Asp Asp Ser 1665	
Trp Asp 1670	Thr Asn Asp Ala	Asn Val Val Cys Arg 1675	Gln Leu Gly Cys 1680	
Gly Trp 1685	Ala Met Ser Ala	Pro Gly Asn Ala Arg 1690	Phe Gly Gln Gly 1695	
Ser Gly 1700	Pro Ile Val Leu	Gly Asp Val Arg Cys 1705	Ser Gly Asn Glu 1710	
Ser Tyr 1715	Leu Trp Ser Cys	Pro His Lys Gly Trp 1720	Leu Thr His Asn 1725	

Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Thr	Gln
1730						1735					1740			
Ile	Asn	Ser	Thr	Thr	Thr	Asp	Trp	Trp	His	Pro	Thr	Thr	Thr	Thr
1745						1750					1755			
Thr	Ala	Arg	Pro	Ser	Ser	Asn	Cys	Gly	Gly	Phe	Leu	Phe	Tyr	Ala
1760						1765					1770			
Ser	Gly	Thr	Phe	Ser	Ser	Pro	Ser	Tyr	Pro	Ala	Tyr	Tyr	Pro	Asn
1775						1780					1785			
Asn	Ala	Lys	Cys	Val	Trp	Glu	Ile	Glu	Val	Asn	Ser	Gly	Tyr	Arg
1790						1795					1800			
Ile	Asn	Leu	Gly	Phe	Ser	Asn	Leu	Lys	Leu	Glu	Ala	His	His	Asn
1805						1810					1815			
Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp	Gly	Ser	Leu	Asn	Ser
1820						1825					1830			
Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp	Thr	Arg	Gln	Ile	Phe
1835						1840					1845			
Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His	Phe	Arg	Ser	Asp	Ile
1850						1855					1860			
Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp	Tyr	Asn	Ser	Phe	Pro
1865						1870					1875			
Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu	Asn	Ser	Ser	Tyr	Gly
1880						1885					1890			
Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His	Gly	Gly	Thr	Trp	Gly
1895						1900					1905			
Ala	Val	Cys	Asp	Asp	Ser	Trp	Thr	Ile	Gln	Glu	Ala	Glu	Val	Val
1910						1915					1920			
Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val	Ser	Ala	Leu	Gly	Asn
1925						1930					1935			
Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile	Thr	Leu	Asp	Asp	Val

1940					1945					1950				
Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp	Gln	Cys	Arg	Asn	Arg
1955					1960					1965				
Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg	Glu	Asp	Ala	Gly	Val
1970					1975					1980				
Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro	Ala	Pro	Phe	Leu	Asn
1985					1990					1995				
Ile	Thr	Arg	Pro	Asn	Asn	Tyr	Ser	Cys	Gly	Gly	Phe	Leu	Ser	Gln
2000					2005					2010				
Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly	Asn	Tyr	Pro
2015					2020					2025				
Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln	Asn	Asn	Tyr
2030					2035					2040				
Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu	Gly	Gly	Cys
2045					2050					2055				
Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr	Arg	Ser	Ser
2060					2065					2070				
Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly	Ser	Phe	Thr
2075					2080					2085				
Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser	Asp	His	Ser
2090					2095					2100				
Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser	Ser	Pro	Ser
2105					2110					2115				
Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu	Pro	Asn	His	Met	Gln	Ala
2120					2125					2130				
Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe	Ser	Ala	Ser
2135					2140					2145				
Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu	Cys	Arg	Pro
2150					2155					2160				

Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro	Tyr	Ser	Gly
2165						2170					2175			
Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile	Asp	Tyr	Ser
2180						2185					2190			
Asn	Leu	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile	Lys	Arg	Arg
2195						2200					2205			
Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu	Gln	Asn	Thr
2210						2215					2220			
Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile	His	Val	Ala
2225						2230					2235			
Asn	Asn	Thr	Ile	Gln	Val	Glu	Glu	Val	Gln	Tyr	Gly	Asn	Phe	Asp
2240						2245					2250			
Val	Asn	Ile	Ser	Phe	Tyr	Thr	Ser	Ser	Ser	Phe	Leu	Tyr	Pro	Val
2255						2260					2265			
Thr	Ser	Arg	Pro	Tyr	Tyr	Val	Asp	Leu	Asn	Gln	Asp	Leu	Tyr	Val
2270						2275					2280			
Gln	Ala	Glu	Ile	Leu	His	Ser	Asp	Ala	Val	Leu	Thr	Leu	Phe	Val
2285						2290					2295			
Asp	Thr	Cys	Val	Ala	Ser	Pro	Tyr	Ser	Asn	Asp	Phe	Thr	Ser	Leu
2300						2305					2310			
Thr	Tyr	Asp	Leu	Ile	Arg	Ser	Gly	Cys	Val	Arg	Asp	Asp	Thr	Tyr
2315						2320					2325			
Gly	Pro	Tyr	Ser	Ser	Pro	Ser	Leu	Arg	Ile	Ala	Arg	Phe	Arg	Phe
2330						2335					2340			
Arg	Ala	Phe	His	Phe	Leu	Asn	Arg	Phe	Pro	Ser	Val	Tyr	Leu	Arg
2345						2350					2355			
Cys	Lys	Met	Val	Val	Cys	Arg	Ala	Tyr	Asp	Pro	Ser	Ser	Arg	Cys
2360						2365					2370			
Tyr	Arg	Gly	Cys	Val	Leu	Arg	Ser	Lys	Arg	Asp	Val	Gly	Ser	Tyr

2375

2380

2385

Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln Thr
 2390 2395 2400

Pro Pro Arg Arg Glu Glu Glu Pro Arg
 2405 2410

<210> 71
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 71

Met Asn Gly Phe Ala Ser Leu Leu Arg Arg Asn Gln Phe Ile Leu Leu
 1 5 10 15

Val Leu Phe Leu Leu Gln Ile Gln Ser Leu Gly Leu Asp Ile Asp Ser
 20 25 30

Arg Pro Thr Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
 35 40 45

Lys Gly Asp Asp Gly Glu Lys Gly Asp Pro Gly Glu Glu Gly Lys His
 50 55 60

Gly Lys Val Gly Arg Met Gly Pro Lys Gly Ile Lys Gly Glu Leu Gly
 65 70 75 80

Asp Met Gly Asp Arg Gly Asn Ile Gly Lys Thr Gly Pro Ile Gly Lys
 85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
 100 105 110

Gly Lys Ala Gly Thr Val Cys Asp Cys Gly Arg Tyr Arg Lys Phe Val
 115 120 125

Gly Gln Leu Asp Ile Ser Ile Ala Arg Leu Lys Thr Ser Met Lys Phe
 130 135 140

Val Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
 145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn
180 185 190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe
195 200 205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Phe Thr Asp
210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
225 230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys Glu Phe
260 265 270

Ile Lys Lys Lys Lys
275

<210> 72
<211> 238
<212> PRT
<213> Gallus gallus

<400> 72

Met Met Ala Thr Ser Leu Leu Thr Thr Asp Lys Pro Glu Glu Lys Met
1 5 10 15

Tyr Ser Cys Pro Ile Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu
20 25 30

Pro Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys Gly Asp Pro
35 40 45

Gly Glu Gly Leu Arg Gly Leu Gln Gly Leu Pro Gly Lys Ala Gly Pro
50 55 60

Gln Gly Leu Lys Gly Glu Val Gly Pro Gln Gly Glu Lys Gly Gln Lys
65 70 75 80

Gly Glu Arg Gly Ile Val Val Thr Asp Asp Leu His Arg Gln Ile Thr
85 90 95

Asp Leu Glu Ala Lys Ile Arg Val Leu Glu Asp Asp Leu Ser Arg Tyr
100 105 110

Lys Lys Ala Leu Ser Leu Lys Asp Val Val Asn Ile Gly Lys Lys Met
115 120 125

Phe Val Ser Thr Gly Lys Lys Tyr Asn Phe Glu Lys Gly Lys Ser Leu
130 135 140

Cys Ala Lys Ala Gly Ser Val Leu Ala Ser Pro Arg Asn Glu Ala Glu
145 150 155 160

Asn Thr Ala Leu Lys Asp Leu Ile Asp Pro Ser Ser Gln Ala Tyr Ile
165 170 175

Gly Ile Ser Asp Ala Gln Thr Glu Gly Arg Phe Met Tyr Leu Ser Gly
180 185 190

Gly Pro Leu Thr Tyr Ser Asn Trp Lys Pro Gly Glu Pro Asn Asn His
195 200 205

Lys Asn Glu Asp Cys Ala Val Ile Glu Asp Ser Gly Lys Trp Asn Asp
210 215 220

Leu Asp Cys Ser Asn Ser Asn Ile Phe Ile Ile Cys Glu Leu
225 230 235

<210> 73

<211> 30

<212> PRT

<213> Gallus gallus

<400> 73

Leu Leu Thr Cys Asp Lys Pro Glu Glu Lys Met Tyr Ser Cys Pro Ile
1 5 10 15

Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu Pro Gly Asp
20 25 30

<210> 74

<211> 60

<212> PRT
<213> Bos taurus

<400> 74

Ala Glu Met Thr Thr Phe Ser Gln Lys Ile Leu Ala Asn Ala Cys Thr
1 5 10 15

Leu Val Met Cys Ser Pro Leu Glu Ser Gly Leu Pro Gly His Asp Gly
20 25 30

Gln Asp Gly Arg Glu Cys Pro His Gly Glu Lys Gly Asp Pro Gly Ser
35 40 45

Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Trp
50 55 60

<210> 75
<211> 301
<212> PRT
<213> Bos taurus

<220>
<221> MISC_FEATURE
<222> (7)..()
<223> Unknown

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Unknown

<400> 75

Glu Glu Met Asp Val Tyr Xaa Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 76

<211> 244
<212> PRT
<213> Mus musculus

<400> 76

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 77
<211> 239
<212> PRT
<213> Mus musculus

<400> 77

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 78
<211> 375
<212> PRT
<213> Homo sapiens

<400> 78

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Ala Leu Gly Lys Gln Gly Asn
115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
165 170 175

Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu
275 280 285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
355 360 365

Arg Leu Val Val Cys Glu Phe
370 375

<210> 79
<211> 255
<212> PRT
<213> Homo sapiens

<400> 79

Met Lys Ala Leu Leu Ala Leu Pro Leu Leu Leu Leu Leu Ser Thr Pro
1 5 10 15

Pro Cys Ala Pro Gln Val Ser Gly Ile Arg Gly Asp Ala Leu Glu Arg
20 25 30

Phe Cys Leu Gln Gln Pro Leu Asp Cys Asp Asp Ile Tyr Ala Gln Gly
35 40 45

Tyr Gln Ser Asp Gly Val Tyr Leu Ile Tyr Pro Ser Gly Pro Ser Val
50 55 60

Pro Val Pro Val Phe Cys Asp Met Thr Thr Glu Gly Gly Lys Trp Thr
65 70 75 80

Val Phe Gln Lys Arg Phe Asn Gly Ser Val Ser Phe Phe Arg Gly Trp
85 90 95

Asn Asp Tyr Lys Leu Gly Phe Gly Arg Ala Asp Gly Glu Tyr Trp Leu
100 105 110

Gly Leu Gln Asn Met His Leu Leu Thr Leu Lys Gln Lys Tyr Glu Leu
115 120 125

Arg Val Asp Leu Glu Asp Phe Glu Asn Asn Thr Ala Tyr Ala Lys Tyr
130 135 140

Ala Asp Phe Ser Ile Ser Pro Asn Ala Val Ser Ala Glu Glu Asp Gly
145 150 155 160

Tyr Thr Leu Phe Val Ala Gly Phe Glu Asp Gly Gly Ala Gly Asp Ser
165 170 175

Leu Ser Tyr His Ser Gly Gln Lys Phe Ser Thr Phe Asp Arg Asp Gln
180 185 190

Asp Leu Phe Val Gln Asn Cys Ala Ala Leu Ser Ser Gly Ala Phe Trp
195 200 205

Phe Arg Ser Cys His Phe Ala Asn Leu Asn Gly Phe Tyr Leu Gly Gly
210 215 220

Ser His Leu Ser Tyr Ala Asn Gly Ile Asn Trp Ala Gln Trp Lys Gly
225 230 235 240

Phe Tyr Tyr Ser Leu Lys Arg Thr Glu Met Lys Ile Arg Arg Ala
245 250 255

<210> 80
<211> 15
<212> PRT
<213> Homo sapiens

<400> 80

Cys Arg Ala Leu Ile Lys Arg Ile Gln Ala Met Ile Pro Lys Gly
1 5 10 15

<210> 81
<211> 374
<212> PRT
<213> Mus musculus

<400> 81

Met Leu Pro Phe Leu Ser Met Leu Val Leu Leu Val Gln Pro Leu Gly
1 5 10 15

Asn Leu Gly Ala Glu Met Lys Ser Leu Ser Gln Arg Ser Val Pro Asn
20 25 30

Thr Cys Thr Leu Val Met Cys Ser Pro Thr Glu Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly Asp
50 55 60

Pro Gly Leu Pro Gly Pro Met Gly Leu Ser Gly Leu Gln Gly Pro Thr
65 70 75 80

Gly Pro Val Gly Pro Lys Gly Glu Asn Gly Ser Ala Gly Glu Pro Gly
85 90 95

Pro Lys Gly Glu Arg Gly Leu Ser Gly Pro Pro Gly Leu Pro Gly Ile
100 105 110

Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Lys Gln Gly Asn Ile
115 120 125

Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys Gly
130 135 140

Glu Val Gly Ala Pro Gly Met Gln Gly Ser Thr Gly Ala Lys Gly Ser
145 150 155 160

Thr Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly Val Gln Gly Ala Pro
165 170 175

Gly Asn Ala Gly Ala Ala Gly Pro Ala Gly Pro Ala Gly Pro Gln Gly
180 185 190

Ala Pro Gly Ser Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Val
195 200 205

Pro Gly Asp Arg Gly Ile Lys Gly Glu Ser Gly Leu Pro Asp Ser Ala
210 215 220

Ala Leu Arg Gln Gln Met Glu Ala Leu Lys Gly Lys Leu Gln Arg Leu
225 230 235 240

Glu Val Ala Phe Ser His Tyr Gln Lys Ala Ala Leu Phe Pro Asp Gly
245 250 255

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr
290 295 300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu

305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 82
<211> 248
<212> PRT
<213> Canis familiaris

<400> 82

Met Trp Leu Arg Cys Leu Ala Leu Ala Leu Thr Leu Leu Met Val Ser
1 5 10 15

Gly Ile Glu Asn Asn Thr Lys Asp Val Cys Val Gly Asn Pro Gly Ile
20 25 30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp
35 40 45

Gly Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Leu Gly Pro Pro Gly
50 55 60

Gly Met Pro Gly His Pro Gly Pro Asn Gly Met Thr Gly Ala Pro Gly
65 70 75 80

Val Ala Gly Glu Arg Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala Ser Leu Asp Glu Glu Leu Gln Thr Thr Leu His
100 105 110

Asp Leu Arg His Gln Ile Leu Gln Thr Met Gly Val Leu Ser Leu His
115 120 125

Glu Ser Leu Leu Val Val Gly Arg Lys Val Phe Ser Ser Asn Ala Gln
130 135 140

Ser Ile Asn Phe Asn Asp Ile Gln Glu Leu Cys Ala Gly Ala Gly Gly
145 150 155 160

Gln Ile Ala Ala Pro Met Ser Pro Glu Glu Asn Glu Ala Val Ala Ser
165 170 175

Ile Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Ser
180 185 190

Pro Asp Ser Gly Asp Phe Gln Tyr Met Asp Gly Ala Pro Val Asn Tyr
195 200 205

Thr Asn Trp Tyr Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Gln Cys
210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asn Lys Asn Cys Leu Gln
225 230 235 240

Tyr Arg Leu Ala Ile Cys Glu Phe
245

<210> 83
<211> 247
<212> PRT
<213> *Oryctolagus cuniculus*

<400> 83

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro
20 25 30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
35 40 45

Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Val Pro Arg Ser Leu Glu Glu Asn Glu Ala Ile Ala Ser Ile
165 170 175

Val Lys Glu Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 84
<211> 374
<212> PRT
<213> Mus musculus

<400> 84

Met Leu Pro Phe Leu Ser Met Leu Val Leu Leu Val Gln Pro Leu Gly
1 5 10 15

Asn Leu Gly Ala Glu Met Lys Ser Leu Ser Gln Arg Ser Val Pro Asn
20 25 30

Thr	Cys	Thr	Leu	Val	Met	Cys	Ser	Pro	Thr	Glu	Asn	Gly	Leu	Pro	Gly		
		35					40					45					
Arg	Asp	Gly	Arg	Asp	Gly	Arg	Glu	Gly	Pro	Arg	Gly	Glu	Lys	Gly	Asp		
	50					55					60						
Pro	Gly	Leu	Pro	Gly	Pro	Met	Gly	Leu	Ser	Gly	Leu	Gln	Gly	Pro	Thr		
65					70					75					80		
Gly	Pro	Val	Gly	Pro	Lys	Gly	Glu	Asn	Gly	Ser	Ala	Gly	Glu	Pro	Gly		
				85					90					95			
Pro	Lys	Gly	Glu	Arg	Gly	Leu	Ser	Gly	Pro	Pro	Gly	Leu	Pro	Gly	Ile		
			100					105						110			
Pro	Gly	Pro	Ala	Gly	Lys	Glu	Gly	Pro	Ser	Gly	Lys	Gln	Gly	Asn	Ile		
		115					120						125				
Gly	Pro	Gln	Gly	Lys	Pro	Gly	Pro	Lys	Gly	Glu	Ala	Gly	Pro	Lys	Gly		
	130					135					140						
Glu	Val	Gly	Ala	Pro	Gly	Met	Gln	Gly	Ser	Thr	Gly	Ala	Lys	Gly	Ser		
145					150					155					160		
Thr	Gly	Pro	Lys	Gly	Glu	Arg	Gly	Ala	Pro	Gly	Val	Gln	Gly	Ala	Pro		
				165					170						175		
Gly	Asn	Ala	Gly	Ala	Ala	Gly	Pro	Ala	Gly	Pro	Ala	Gly	Pro	Gln	Gly		
			180					185						190			
Ala	Pro	Gly	Ser	Arg	Gly	Pro	Pro	Gly	Leu	Lys	Gly	Asp	Arg	Gly	Val		
		195					200					205					
Pro	Gly	Asp	Arg	Gly	Ile	Lys	Gly	Glu	Ser	Gly	Leu	Pro	Asp	Ser	Ala		
	210					215						220					
Ala	Leu	Arg	Gln	Gln	Met	Glu	Ala	Leu	Lys	Gly	Lys	Leu	Gln	Arg	Leu		
225					230					235					240		
Glu	Val	Ala	Phe	Ser	His	Tyr	Gln	Lys	Ala	Ala	Leu	Phe	Pro	Asp	Gly		
				245					250					255			

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr
290 295 300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu
305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 85
<211> 158
<212> PRT
<213> Homo sapiens

<400> 85

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys
20 25 30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 86
<211> 158
<212> PRT
<213> Homo sapiens

<400> 86

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys
20 25 30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 87
<211> 158
<212> PRT
<213> Homo sapiens

<400> 87

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys
20 25 30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 88

<211> 2403
<212> PRT
<213> Homo sapiens

<400> 88

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Leu Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Asp
450 455 460

Thr Leu Pro Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser
465 470 475 480

Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
485 490 495

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
500 505 510

Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly
515 520 525

Trp Ala Met Leu Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
530 535 540

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu
545 550 555 560

Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His Ser
565 570 575

Glu Asp Ala Gly Val Ile Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu
580 585 590

Gly Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu
595 600 605

Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn
610 615 620

Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
625 630 635 640

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu
645 650 655

Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro
660 665 670

Asn Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
675 680 685

Val Ile Cys Ser Ala Ala Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr
690 695 700

Leu Ser Thr Ile Thr Leu Pro Pro Ser Thr Val Gly Ser Glu Ser Ser
705 710 715 720

Leu Thr Leu Arg Leu Val Asn Gly Ser Asp Arg Cys Gln Gly Arg Val
725 730 735

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp
740 745 750

Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
755 760 765

Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro
770 775 780

Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp
785 790 795 800

Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
805 810 815

Asp Ala Gly Val Ile Cys Ser Val Ser Gln Ser Arg Pro Thr Pro Ser
820 825 830

Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser
835 840 845

Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
850 855 860

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
865 870 875 880

Trp Asp Thr Ser Asp Ala Asn Val Val Cys Arg Arg Leu Gly Cys Gly
885 890 895

Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
900 905 910

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu
915 920 925

Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gln His Ser
930 935 940

Glu Asp Ala Gly Val Ile Cys Ser Ala Ala His Ser Trp Ser Thr Pro
945 950 955 960

Ser Pro Asp Thr Leu Pro Thr Ile Thr Leu Pro Ala Ser Thr Val Gly
965 970 975

Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
980 985 990

Gln Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys
995 1000 1005

Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln
1010 1015 1020

Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe
1025 1030 1035

Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
1040 1045 1050

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
1055 1060 1065

Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser
1070 1075 1080

Ala Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
1085 1090 1095

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg
1100 1105 1110

Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu
1115 1120 1125

Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr
1130						1135					1140			
Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala
1145						1150					1155			
Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro
1160						1165					1170			
Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu
1175						1180					1185			
Trp	Ser	Cys	Pro	His	Asp	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His
1190						1195					1200			
His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro
1205						1210					1215			
Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	His	Ala	Ser	Thr	Ala
1220						1225					1230			
Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp
1235						1240					1245			
Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly	Pro	Trp	Gly
1250						1255					1260			
Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val
1265						1270					1275			
Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Asn
1280						1285					1290			
Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val
1295						1300					1305			
Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn
1310						1315					1320			
Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val
1325						1330					1335			
Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr
1340						1345					1350			

Trp	Pro	Thr	Ser	His	Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser	Leu
	1355					1360					1365			
Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg	Val
	1370					1375					1380			
Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr
	1385					1390					1395			
Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys
	1400					1405					1410			
Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Ser	Ala	Arg	Phe	Gly	Gln	Gly
	1415					1420					1425			
Ser	Gly	Pro	Ile	Ala	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu
	1430					1435					1440			
Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn
	1445					1450					1455			
Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser	Gln
	1460					1465					1470			
Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	Arg	Ala
	1475					1480					1485			
Ser	Thr	Ala	Gly	Ser	Glu	Ser	Thr	Leu	Ala	Leu	Arg	Leu	Val	Asn
	1490					1495					1500			
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	1505					1510					1515			
Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp	Ala
	1520					1525					1530			
Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala
	1535					1540					1545			
Pro	Gly	Asn	Ala	Gln	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu
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Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys
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Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp
1580						1585					1590			
Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala	Gln	Ser	Gln	Ser	Thr	Pro	Arg
1595						1600					1605			
Pro	Asp	Thr	Trp	Leu	Thr	Thr	Asn	Leu	Pro	Ala	Leu	Thr	Val	Gly
1610						1615					1620			
Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg
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Cys	Arg	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr
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Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys
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Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala
1670						1675					1680			
Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg
1685						1690					1695			
Cys	Ser	Gly	Asn	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Lys	Gly
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Trp	Leu	Thr	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile
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Cys	Ser	Ala	Thr	Gln	Ile	Asn	Ser	Thr	Thr	Thr	Asp	Trp	Trp	His
1730						1735					1740			
Pro	Thr	Thr	Thr	Thr	Thr	Ala	Arg	Pro	Ser	Ser	Asn	Cys	Gly	Gly
1745						1750					1755			
Phe	Leu	Phe	Tyr	Ala	Ser	Gly	Thr	Phe	Ser	Ser	Pro	Ser	Tyr	Pro
1760						1765					1770			
Ala	Tyr	Tyr	Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Glu	Ile	Glu	Val
1775						1780					1785			

Asn	Ser	Gly	Tyr	Arg	Ile	Asn	Leu	Gly	Phe	Ser	Asn	Leu	Lys	Leu
1790						1795					1800			
Glu	Ala	His	His	Asn	Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp
1805						1810					1815			
Gly	Ser	Leu	Asn	Ser	Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp
1820						1825					1830			
Thr	Arg	Gln	Ile	Phe	Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His
1835						1840					1845			
Phe	Arg	Ser	Asp	Ile	Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp
1850						1855					1860			
Tyr	Asn	Ser	Phe	Pro	Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu
1865						1870					1875			
Asn	Ser	Ser	Tyr	Gly	Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His
1880						1885					1890			
Gly	Gly	Thr	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser	Trp	Thr	Ile	Gln
1895						1900					1905			
Glu	Ala	Glu	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val
1910						1915					1920			
Ser	Ala	Leu	Gly	Asn	Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile
1925						1930					1935			
Thr	Leu	Asp	Asp	Val	Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp
1940						1945					1950			
Gln	Cys	Arg	Asn	Arg	Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg
1955						1960					1965			
Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro
1970						1975					1980			
Ala	Pro	Phe	Leu	Asn	Ile	Thr	Arg	Pro	Asn	Thr	Asp	Tyr	Ser	Cys
1985						1990					1995			

Gly	Gly	Phe	Leu	Ser	Gln	Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe
	2000					2005					2010			
Tyr	Pro	Gly	Asn	Tyr	Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile
	2015					2020					2025			
Glu	Val	Gln	Asn	Asn	Tyr	Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val
	2030					2035					2040			
Gln	Leu	Glu	Gly	Gly	Cys	Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp
	2045					2050					2055			
Gly	Pro	Tyr	Arg	Ser	Ser	Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly
	2060					2065					2070			
Ala	Arg	Gly	Ser	Phe	Thr	Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg
	2075					2080					2085			
Phe	Ile	Ser	Asp	His	Ser	Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu
	2090					2095					2100			
Tyr	Tyr	Ser	Ser	Pro	Ser	Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu
	2105					2110					2115			
Pro	Asn	His	Met	Gln	Ala	Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser
	2120					2125					2130			
Leu	Gly	Phe	Ser	Ala	Ser	Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly
	2135					2140					2145			
Tyr	Tyr	Glu	Cys	Arg	Pro	Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe
	2150					2155					2160			
Thr	Ile	Pro	Tyr	Ser	Gly	Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn
	2165					2170					2175			
Asp	Thr	Ile	Asp	Tyr	Ser	Asn	Phe	Leu	Thr	Ala	Ala	Val	Ser	Gly
	2180					2185					2190			
Gly	Ile	Ile	Lys	Arg	Arg	Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys
	2195					2200					2205			
Arg	Met	Leu	Gln	Asn	Thr	Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn
	2210					2215					2220			

Asp Thr Ile His Val Ala Asn Asn Thr Ile Gln Val Glu Glu Val
2225 2230 2235

Gln Tyr Gly Asn Phe Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser
2240 2245 2250

Ser Phe Leu Tyr Pro Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu
2255 2260 2265

Asn Gln Asp Leu Tyr Val Gln Ala Glu Ile Leu His Ser Asp Ala
2270 2275 2280

Val Leu Thr Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr Ser
2285 2290 2295

Asn Asp Phe Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys
2300 2305 2310

Val Arg Asp Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg
2315 2320 2325

Ile Ala Arg Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe
2330 2335 2340

Pro Ser Val Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr
2345 2350 2355

Asp Pro Ser Ser Arg Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys
2360 2365 2370

Arg Asp Val Gly Ser Tyr Gln Glu Lys Val Asp Val Val Leu Gly
2375 2380 2385

Pro Ile Gln Leu Gln Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
2390 2395 2400

<210> 89
<211> 2413
<212> PRT
<213> Homo sapiens

<400> 89

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln

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			20					25					30				
Leu	Ile	Pro	Ser	Glu	Val	Pro	Leu	Asp	Gln	Thr	Val	Ala	Glu	Gly	Ser		
		35					40					45					
Pro	Phe	Pro	Ser	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Ala	Ala	Glu	Gly	Ser		
	50					55					60						
Pro	Ile	Ser	Leu	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Val	Ala	Glu	Gly	Ser		
65					70					75					80		
Leu	Ile	Pro	Ser	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Val	Ala	Glu	Gly	Ser		
				85					90					95			
Asp	Ser	Gly	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Asp	Gly	Arg	Cys	Gln		
			100					105					110				
Gly	Arg	Val	Glu	Ile	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp		
		115					120					125					
Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly		
		130				135					140						
Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Trp	Phe	Gly	Gln	Gly		
145					150					155					160		
Ser	Gly	Pro	Ile	Ala	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser		
				165					170					175			
Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly		
			180					185					190				
His	Gly	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala	Gln	Pro	Gln	Ser		
		195					200					205					
Thr	Leu	Arg	Pro	Glu	Ser	Trp	Pro	Val	Arg	Ile	Ser	Pro	Pro	Val	Pro		
	210					215					220						
Thr	Glu	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly		
225					230					235					240		

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr

465		470		475		480									
Leu	Pro	Ala	Ser	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu
				485					490					495	
Val	Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg
			500					505					510		
Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala
		515					520					525			
Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Leu	Ala	Pro
	530					535					540				
Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp
545					550					555					560
Val	Arg	Cys	Ser	Gly	Asn	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn
				565					570					575	
Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	Ser	Glu	Asp	Ala	Gly	Val	Ile
			580					585					590		
Cys	Ser	Gly	Pro	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly
		595					600					605			
Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly
	610					615					620				
Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys
625					630					635					640
Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg
				645					650					655	
Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser
			660					665					670		
Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	Asn	Asn	Gly	Trp	Leu	Ser
		675					680					685			
His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala
	690					695					700				

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn

930

935

940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
 945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
 965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
 980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
 995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
 1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
 1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
 1040 1045 1050

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
 1055 1060 1065

Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
 1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
 1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
 1130 1135 1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
 1145 1150 1155

Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly
1160						1165					1170			
Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp
1175						1180					1185			
Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His
1190						1195					1200			
Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly
1205						1210					1215			
Val	Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp
1220						1225					1230			
Thr	Trp	Pro	Thr	Ser	His	Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser
1235						1240					1245			
Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg
1250						1255					1260			
Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp
1265						1270					1275			
Tyr	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly
1280						1285					1290			
Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln
1295						1300					1305			
Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His
1310						1315					1320			
Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His
1325						1330					1335			
Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser
1340						1345					1350			
Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	His
1355						1360					1365			
Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val

1370		1375		1380
Asn Gly 1385	Gly Asp Arg Cys	Gln Gly Arg Val Glu 1390	Val Leu Tyr Arg 1395	
Gly Ser 1400	Trp Gly Thr Val	Cys Asp Asp Tyr Trp 1405	Asp Thr Asn Asp 1410	
Ala Asn 1415	Val Val Cys Arg	Gln Leu Gly Cys Gly 1420	Trp Ala Thr Ser 1425	
Ala Pro 1430	Gly Asn Ala Arg	Phe Gly Gln Gly Ser 1435	Gly Pro Ile Val 1440	
Leu Asp 1445	Asp Val Arg Cys	Ser Gly His Glu Ser 1450	Tyr Leu Trp Ser 1455	
Cys Pro 1460	His Asn Gly Trp	Leu Ser His Asn Cys 1465	Gly His His Glu 1470	
Asp Ala 1475	Gly Val Ile Cys	Ser Ala Ser Gln Ser 1480	Gln Pro Thr Pro 1485	
Ser Pro 1490	Asp Thr Trp Pro	Thr Ser Arg Ala Ser 1495	Thr Ala Gly Ser 1500	
Glu Ser 1505	Thr Leu Ala Leu	Arg Leu Val Asn Gly 1510	Gly Asp Arg Cys 1515	
Arg Gly 1520	Arg Val Glu Val	Leu Tyr Gln Gly Ser 1525	Trp Gly Thr Val 1530	
Cys Asp 1535	Asp Tyr Trp Asp	Thr Asn Asp Ala Asn 1540	Val Val Cys Arg 1545	
Gln Leu 1550	Gly Cys Gly Trp	Ala Met Ser Ala Pro 1555	Gly Asn Ala Gln 1560	
Phe Gly 1565	Gln Gly Ser Gly	Pro Ile Val Leu Asp 1570	Asp Val Arg Cys 1575	
Ser Gly 1580	His Glu Ser Tyr	Leu Trp Ser Cys Pro 1585	His Asn Gly Trp 1590	

Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys
1595						1600					1605			
Ser	Ala	Ala	Gln	Ser	Gln	Ser	Thr	Pro	Arg	Pro	Asp	Thr	Trp	Leu
1610						1615					1620			
Thr	Thr	Asn	Leu	Pro	Ala	Leu	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu
1625						1630					1635			
Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Arg	Gly	Arg	Val
1640						1645					1650			
Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser
1655						1660					1665			
Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys
1670						1675					1680			
Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly
1685						1690					1695			
Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	Asn	Glu
1700						1705					1710			
Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Lys	Gly	Trp	Leu	Thr	His	Asn
1715						1720					1725			
Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Thr	Gln
1730						1735					1740			
Ile	Asn	Ser	Thr	Thr	Thr	Asp	Trp	Trp	His	Pro	Thr	Thr	Thr	Thr
1745						1750					1755			
Thr	Ala	Arg	Pro	Ser	Ser	Asn	Cys	Gly	Gly	Phe	Leu	Phe	Tyr	Ala
1760						1765					1770			
Ser	Gly	Thr	Phe	Ser	Ser	Pro	Ser	Tyr	Pro	Ala	Tyr	Tyr	Pro	Asn
1775						1780					1785			
Asn	Ala	Lys	Cys	Val	Trp	Glu	Ile	Glu	Val	Asn	Ser	Gly	Tyr	Arg
1790						1795					1800			
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1805						1810						1815			
Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp	Gly	Ser	Leu	Asn	Ser	
1820						1825					1830				
Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp	Thr	Arg	Gln	Ile	Phe	
1835						1840					1845				
Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His	Phe	Arg	Ser	Asp	Ile	
1850						1855					1860				
Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp	Tyr	Asn	Ser	Phe	Pro	
1865						1870					1875				
Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu	Asn	Ser	Ser	Tyr	Gly	
1880						1885					1890				
Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His	Gly	Gly	Thr	Trp	Gly	
1895						1900					1905				
Thr	Val	Cys	Asp	Asp	Ser	Trp	Thr	Ile	Gln	Glu	Ala	Glu	Val	Val	
1910						1915					1920				
Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val	Ser	Ala	Leu	Gly	Asn	
1925						1930					1935				
Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile	Thr	Leu	Asp	Asp	Val	
1940						1945					1950				
Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp	Gln	Cys	Arg	Asn	Arg	
1955						1960					1965				
Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg	Glu	Asp	Ala	Gly	Val	
1970						1975					1980				
Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro	Ala	Pro	Phe	Leu	Asn	
1985						1990					1995				
Ile	Thr	Arg	Pro	Asn	Thr	Asp	Tyr	Ser	Cys	Gly	Gly	Phe	Leu	Ser	
2000						2005					2010				
Gln	Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly	Asn	Tyr	
2015						2020					2025				

Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln	Asn	Asn
2030						2035					2040			
Tyr	Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu	Gly	Gly
2045						2050					2055			
Cys	Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr	Arg	Ser
2060						2065					2070			
Ser	Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly	Ser	Phe
2075						2080					2085			
Thr	Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser	Asp	His
2090						2095					2100			
Ser	Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser	Ser	Pro
2105						2110					2115			
Ser	Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu	Pro	Asn	His	Met	Gln
2120						2125					2130			
Ala	Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe	Ser	Ala
2135						2140					2145			
Ser	Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu	Cys	Arg
2150						2155					2160			
Pro	Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro	Tyr	Ser
2165						2170					2175			
Gly	Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile	Asp	Tyr
2180						2185					2190			
Ser	Asn	Phe	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile	Lys	Arg
2195						2200					2205			
Arg	Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu	Gln	Asn
2210						2215					2220			
Thr	Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile	His	Val
2225						2230					2235			
Ala	Asn	Asn	Thr	Ile	Gln	Val	Glu	Glu	Val	Gln	Tyr	Gly	Asn	Phe

2240		2245		2250
Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro	2255	2260	2265	
Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr	2270	2275	2280	
Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe	2285	2290	2295	
Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser	2300	2305	2310	
Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr	2315	2320	2325	
Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg	2330	2335	2340	
Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu	2345	2350	2355	
Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg	2360	2365	2370	
Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser	2375	2380	2385	
Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln	2390	2395	2400	
Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg	2405	2410		
<210> 90				
<211> 1785				
<212> PRT				
<213> Homo sapiens				
<400> 90				
Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln	1	5	10	15

Val	Leu	Ser	Thr	Gly	Gly	Trp	Ile	Pro	Arg	Thr	Thr	Asp	Tyr	Ala	Ser	20	25	30
Leu	Ile	Pro	Ser	Glu	Val	Pro	Leu	Asp	Gln	Thr	Val	Ala	Glu	Gly	Ser	35	40	45
Pro	Phe	Pro	Ser	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Ala	Ala	Glu	Gly	Ser	50	55	60
Pro	Ile	Ser	Leu	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Val	Ala	Glu	Gly	Ser	65	70	75
Leu	Ile	Pro	Ser	Glu	Ser	Thr	Leu	Glu	Ser	Thr	Val	Ala	Glu	Gly	Ser	85	90	95
Asp	Ser	Gly	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Asp	Gly	Arg	Cys	Gln	100	105	110
Gly	Arg	Val	Glu	Ile	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	115	120	125
Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	130	135	140
Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Trp	Phe	Gly	Gln	Gly	145	150	155
Ser	Gly	Pro	Ile	Ala	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser	165	170	175
Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	180	185	190
His	Gly	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala	Gln	Pro	Gln	Ser	195	200	205
Thr	Leu	Arg	Pro	Glu	Ser	Trp	Pro	Val	Arg	Ile	Ser	Pro	Pro	Val	Pro	210	215	220
Thr	Glu	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	225	230	235
Asp	Arg	Cys	Arg	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	245	250	255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Gln
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp Ala Met Ser Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly His Glu Ser Tyr Pro Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Ala Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro
595 600 605

Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg
610 615 620

Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr
625 630 635 640

Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
645 650 655

Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala
660 665 670

Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp
675 680 685

Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
690 695 700

Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val
705 710 715 720

Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp
725 730 735

Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu
740 745 750

Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu
755 760 765

Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn
770 775 780

Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
785 790 795 800

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu
805 810 815

Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro
820 825 830

His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
835 840 845

Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr
850 855 860

Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser Glu Ser Thr Leu Ala
865 870 875 880

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val Glu Val
885 890 895

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr
900 905 910

Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met
915 920 925

Ser Ala Pro Gly Asn Ala Gln Phe Gly Gln Gly Ser Gly Pro Ile Val
930 935 940

Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys
945 950 955 960

Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala
965 970 975

Gly Val Ile Cys Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp
980 985 990

Thr Trp Leu Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser
995 1000 1005

Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly
1010 1015 1020

Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
1025 1030 1035

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu
1040 1045 1050

Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly
1055 1060 1065

Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly
1070 1075 1080

Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr
1085 1090 1095

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala
1100 1105 1110

Thr Gln Ile Asn Ser Thr Thr Thr Asp Trp Trp His Pro Thr Thr
1115 1120 1125

Thr Thr Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe
1130 1135 1140

Tyr Ala Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr
1145 1150 1155

Pro Asn Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly
1160 1165 1170

Tyr	Arg	Ile	Asn	Leu	Gly	Phe	Ser	Asn	Leu	Lys	Leu	Glu	Ala	His
1175						1180					1185			
His	Asn	Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp	Gly	Ser	Leu
1190						1195					1200			
Asn	Ser	Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp	Thr	Arg	Gln
1205						1210					1215			
Ile	Phe	Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His	Phe	Arg	Ser
1220						1225					1230			
Asp	Ile	Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp	Tyr	Asn	Ser
1235						1240					1245			
Phe	Pro	Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu	Asn	Ser	Ser
1250						1255					1260			
Tyr	Gly	Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His	Gly	Gly	Thr
1265						1270					1275			
Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser	Trp	Thr	Ile	Gln	Glu	Ala	Glu
1280						1285					1290			
Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val	Ser	Ala	Leu
1295						1300					1305			
Gly	Asn	Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile	Thr	Leu	Asp
1310						1315					1320			
Asp	Val	Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp	Gln	Cys	Arg
1325						1330					1335			
Asn	Arg	Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg	Glu	Asp	Ala
1340						1345					1350			
Gly	Val	Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro	Ala	Pro	Phe
1355						1360					1365			
Leu	Asn	Ile	Thr	Arg	Pro	Asn	Thr	Asp	Tyr	Ser	Cys	Gly	Gly	Phe
1370						1375					1380			

Leu	Ser	Gln	Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly
1385						1390					1395			
Asn	Tyr	Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln
1400						1405					1410			
Asn	Asn	Tyr	Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu
1415						1420					1425			
Gly	Gly	Cys	Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr
1430						1435					1440			
Arg	Ser	Ser	Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly
1445						1450					1455			
Ser	Phe	Thr	Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser
1460						1465					1470			
Asp	His	Ser	Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser
1475						1480					1485			
Ser	Pro	Ser	Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu	Pro	Asn	His
1490						1495					1500			
Met	Gln	Ala	Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe
1505						1510					1515			
Ser	Ala	Ser	Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu
1520						1525					1530			
Cys	Arg	Pro	Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro
1535						1540					1545			
Tyr	Ser	Gly	Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile
1550						1555					1560			
Asp	Tyr	Ser	Asn	Phe	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile
1565						1570					1575			
Lys	Arg	Arg	Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu
1580						1585					1590			
Gln	Asn	Thr	Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile
1595						1600					1605			

His Val Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly
1610 1615 1620

Asn Phe Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu
1625 1630 1635

Tyr Pro Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp
1640 1645 1650

Leu Tyr Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr
1655 1660 1665

Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe
1670 1675 1680

Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp
1685 1690 1695

Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg
1700 1705 1710

Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val
1715 1720 1725

Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser
1730 1735 1740

Ser Arg Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val
1745 1750 1755

Gly Ser Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln
1760 1765 1770

Leu Gln Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
1775 1780 1785

<210> 91
<211> 34
<212> PRT
<213> Bos taurus

<400> 91

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val

1	5	10	15
Val Val Val	Val Leu Leu Val Val	Val Ile Val Gly Ala	Leu Leu Met
	20	25	30

Gly Leu

<210> 92
 <211> 35
 <212> PRT
 <213> Canis familiaris

<400> 92

Leu Gly Ile	Pro Cys Phe	Pro Ser Ser	Leu Lys Arg	Leu Leu Ile Ile
1	5	10	15	

Val Val Val	Ile Val Leu Val Val	Val Val Ile Val Gly	Ala Leu Leu
	20	25	30

Met Gly Leu
 35

<210> 93
 <211> 371
 <212> PRT
 <213> Bos taurus

<400> 93

Met Leu Leu Leu	Pro Leu Ser Val	Leu Leu Leu Leu	Thr Gln Pro Trp
1	5	10	15

Arg Ser Leu Gly	Ala Glu Met Thr	Thr Phe Ser Gln	Lys Ile Leu Ala
	20	25	30

Asn Ala Cys Thr	Leu Val Met Cys	Ser Pro Leu Glu	Ser Gly Leu Pro
	35	40	45

Gly His Asp Gly	Gln Asp Gly Arg	Glu Cys Pro His	Gly Glu Lys Gly
	50	55	60

Asp Pro Gly Ser	Pro Gly Pro Ala	Gly Arg Ala Gly	Arg Pro Gly Trp
	65	70	75

Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val Gly Glu Pro

85

90

95

Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly Met Pro Gly
 100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
 115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys Gly Gly Val
 130 135 140

Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly Leu Lys Gly
 145 150 155 160

Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg Ala Gly Val
 165 170 175

Thr Gly Pro Ser Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
 180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Thr Gly
 195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Lys Gln Arg
 210 215 220

Val Thr Ile Leu Asp Gly His Leu Arg Arg Phe Gln Asn Ala Phe Ser
 225 230 235 240

Gln Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu
 245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu
 260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser
 275 280 285

Ala Glu Asn Glu Ala Val Thr Gln Met Val Arg Ala Gln Glu Lys Asn
 290 295 300

Ala Tyr Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Arg Phe Thr Tyr
 305 310 315 320

Pro Thr Gly Glu Ile Leu Val Tyr Ser Asn Trp Ala Asp Gly Glu Pro
325 330 335

Asn Asn Ser Asp Glu Gly Gln Pro Glu Asn Cys Val Glu Ile Phe Pro
340 345 350

Asp Gly Lys Trp Asn Asp Val Pro Cys Ser Lys Gln Leu Leu Val Ile
355 360 365

Cys Glu Phe
370

<210> 94
<211> 375
<212> PRT
<213> Homo sapiens

<400> 94

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Ala Leu Gly Lys Gln Gly Asn
115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
165 170 175

Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu
275 280 285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
355 360 365

Arg Leu Val Val Cys Glu Phe
370 375

<210> 95
<211> 197
<212> PRT
<213> Homo sapiens

<400> 95

Met Asp Val Gly Ser Lys Glu Val Leu Met Glu Ser Pro Pro Asp Tyr
1 5 10 15

Ser Ala Ala Pro Arg Gly Arg Phe Gly Ile Pro Cys Cys Pro Val His
20 25 30

Leu Lys Arg Leu Leu Ile Val Val Val Val Val Leu Ile Val Val
35 40 45

Val Ile Val Gly Ala Leu Leu Met Gly Leu His Met Ser Gln Lys His
50 55 60

Thr Glu Met Val Leu Glu Met Ser Ile Gly Ala Pro Glu Ala Gln Gln
65 70 75 80

Arg Leu Ala Leu Ser Glu His Leu Val Thr Thr Ala Thr Phe Ser Ile
85 90 95

Gly Ser Thr Gly Leu Val Val Tyr Asp Tyr Gln Gln Leu Leu Ile Ala
100 105 110

Tyr Lys Pro Ala Pro Gly Thr Cys Cys Tyr Ile Met Lys Ile Ala Pro
115 120 125

Glu Ser Ile Pro Ser Leu Glu Ala Leu Asn Arg Lys Val His Asn Phe
130 135 140

Gln Met Glu Cys Ser Leu Gln Ala Lys Pro Ala Val Pro Thr Ser Lys
145 150 155 160

Leu Gly Gln Ala Glu Gly Arg Asp Ala Gly Ser Ala Pro Ser Gly Gly
165 170 175

Asp Pro Ala Phe Leu Gly Met Ala Val Asn Thr Leu Cys Gly Glu Val
180 185 190

Pro Leu Tyr Tyr Ile
195

<210> 96
<211> 248
<212> PRT
<213> Canis familiaris

<400> 96

Met Trp Leu Arg Cys Leu Ala Leu Ala Leu Thr Leu Leu Met Val Ser
1 5 10 15

Gly Ile Glu Asn Asn Thr Lys Asp Val Cys Val Gly Asn Pro Gly Ile
20 25 30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp
35 40 45

Gly Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Leu Gly Pro Pro Gly
50 55 60

Gly Met Pro Gly His Pro Gly Pro Asn Gly Met Thr Gly Ala Pro Gly
65 70 75 80

Val Ala Gly Glu Arg Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala Ser Leu Asp Glu Glu Leu Gln Thr Thr Leu His
100 105 110

Asp Leu Arg His Gln Ile Leu Gln Thr Met Gly Val Leu Ser Leu His
115 120 125

Glu Ser Leu Leu Val Val Gly Arg Lys Val Phe Ser Ser Gly Ala Gln
130 135 140

Ser Ile Asn Phe Asn Asp Ile Gln Glu Leu Cys Ala Gly Ala Gly Gly
145 150 155 160

Gln Ile Ala Ala Pro Met Ser Pro Glu Glu Asn Glu Ala Val Ala Ser
165 170 175

Ile Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Ser
180 185 190

Pro Asp Ser Gly Asp Phe Gln Tyr Met Asp Gly Ala Pro Val Asn Tyr
195 200 205

Thr Asn Trp Tyr Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Gln Cys
210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asn Lys Asn Cys Leu Gln
225 230 235 240

Tyr Arg Leu Ala Ile Cys Glu Phe
245

<210> 97
<211> 248
<212> PRT
<213> Homo sapiens

<400> 97

Met Trp Leu Cys Pro Leu Ala Leu Asn Leu Ile Leu Met Ala Ala Ser
1 5 10 15

Gly Ala Val Cys Glu Val Lys Asp Val Cys Val Gly Ser Pro Gly Ile
20 25 30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg His Gly Arg Asp
35 40 45

Gly Leu Lys Gly Asp Leu Gly Pro Pro Gly Pro Met Gly Pro Pro Gly
50 55 60

Glu Met Pro Cys Pro Pro Gly Asn Asp Gly Leu Pro Gly Ala Pro Gly
65 70 75 80

Ile Pro Gly Glu Cys Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala His Leu Asp Glu Glu Leu Gln Ala Thr Leu His
100 105 110

Asp Phe Arg His Gln Ile Leu Gln Thr Arg Gly Ala Leu Ser Leu Gln
115 120 125

Gly Ser Ile Met Thr Val Gly Glu Lys Val Phe Ser Ser Asn Gly Gln

130

135

140

Ser Ile Thr Phe Asp Ala Ile Gln Glu Ala Cys Ala Arg Ala Gly Gly
 145 150 155 160

Arg Ile Ala Val Pro Arg Asn Pro Glu Glu Asn Glu Ala Ile Ala Ser
 165 170 175

Phe Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Val Gly Leu Thr Glu Gly
 180 185 190

Pro Ser Pro Gly Asp Phe Arg Tyr Ser Asp Gly Thr Pro Val Asn Tyr
 195 200 205

Thr Asn Trp Tyr Arg Gly Glu Pro Ala Gly Arg Gly Lys Glu Gln Cys
 210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Leu Tyr
 225 230 235 240

Ser Arg Leu Thr Ile Cys Glu Phe
 245

<210> 98
 <211> 301
 <212> PRT
 <213> Bos taurus

<400> 98

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
 1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
 20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
 35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
 50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
 65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 99

<211> 369

<212> PRT

<213> Bos taurus

<400> 99

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Asp Pro Gly Ala Pro Gly Arg Ala Gly Ala
165 170 175

Pro Gly Pro Arg Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Thr Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Arg Gln Arg

210

215

220

Val Gly Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
 225 230 235 240

Gln Tyr Lys Lys Ala Met Leu Phe Pro Asn Gly Arg Ser Val Gly Glu
 245 250 255

Lys Ile Phe Lys Thr Val Gly Ser Glu Lys Thr Phe Gln Asp Ala Gln
 260 265 270

Gln Ile Cys Thr Gln Ala Gly Gly Gln Leu Pro Ser Pro Arg Ser Gly
 275 280 285

Ala Glu Asn Glu Ala Leu Thr Gln Leu Ala Thr Ala Gln Asn Lys Ala
 290 295 300

Ala Phe Leu Ser Met Ser Asp Thr Arg Lys Glu Gly Thr Phe Ile Tyr
 305 310 315 320

Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp Ala Pro Gln Glu Pro
 325 330 335

Asn Asn Asp Gly Gly Ser Glu Asn Cys Val Glu Ile Phe Pro Asn Gly
 340 345 350

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
 355 360 365

Phe

<210> 100

<211> 116

<212> PRT

<213> Sus scrofa

<400> 100

Ala Val Gly Glu Lys Val Phe Ser Thr Asn Gly Gln Ser Val Ala Phe
 1 5 10 15

Asp Val Ile Arg Glu Leu Cys Ala Arg Ala Gly Gly Arg Ile Ala Ala
 20 25 30

Pro Arg Ser Pro Glu Glu Asn Glu Ala Ile Ala Ser Ile Val Lys Lys
35 40 45

His Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Gly Pro Thr Ala Gly
50 55 60

Asp Phe Phe Tyr Leu Asp Gly Thr Pro Val Asn Tyr Thr Asn Trp Tyr
65 70 75 80

Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Lys Cys Val Glu Met Tyr
85 90 95

Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Gln Gln Tyr Arg Leu Ala
100 105 110

Ile Cys Glu Phe
115

<210> 101
<211> 378
<212> PRT
<213> Sus scrofa

<400> 101

Met Leu Leu Leu Pro Leu Ser Val Leu Ile Leu Leu Thr Gln Pro Pro
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Thr Tyr Ser Gln Arg Ala Val Ala
20 25 30

Asn Ala Cys Ala Leu Val Met Cys Ser Pro Met Glu Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Val Gly Arg Ala Gly Met Pro Gly Leu
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Thr Gly Glu Pro
85 90 95

Gly Ala Lys Gly Asp Ile Gly Pro Cys Gly Pro Pro Gly Pro Pro Gly
100 105 110

Ile Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Gln Gln Gly Asn
115 120 125

Ile Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Leu Gly Met Gln Gly Ser Thr Gly Ala Arg Gly
145 150 155 160

Pro Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Glu Arg Gly Ala
165 170 175

Pro Gly Ser Ala Gly Ala Ala Gly Pro Ala Gly Ala Thr Gly Pro Gln
180 185 190

Gly Pro Ser Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly
195 200 205

Pro Pro Gly Glu Arg Gly Ala Lys Gly Glu Ser Gly Leu Pro Gly Ile
210 215 220

Thr Ala Leu Arg Gln Gln Val Glu Thr Leu Gln Gly Gln Val Gln Arg
225 230 235 240

Leu Gln Lys Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Arg Gly Val Gly Glu Lys Ile Phe Lys Thr Gly Gly Phe Glu Lys
260 265 270

Thr Phe Gln Asp Ala Gln Gln Val Cys Thr Gln Ala Gly Gly Gln Met
275 280 285

Ala Ser Pro Arg Ser Glu Thr Glu Asn Glu Ala Leu Ser Gln Leu Val
290 295 300

Thr Ala Gln Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Ile Lys Thr
305 310 315 320

Glu Gly Asn Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ala Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ser Ser Gly Ala Glu

340

345

350

Asn Cys Val Glu Ile Phe Pro Asn Gly Lys Trp Asn Asp Lys Ala Cys
 355 360 365

Gly Glu Leu Arg Leu Val Ile Cys Glu Phe
 370 375

<210> 102
 <211> 34
 <212> PRT
 <213> Bos taurus

<400> 102

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val
 1 5 10 15

Val Val Val Val Leu Leu Val Val Val Ile Val Gly Ala Leu Leu Met
 20 25 30

Gly Leu

<210> 103
 <211> 369
 <212> PRT
 <213> Bos taurus

<400> 103

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
 1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
 20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
 35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
 50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
 65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro

85

90

95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
 100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
 115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Val
 130 135 140

Gly Ala Pro Gly Ile Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
 145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Pro Gly Ala Pro Gly Arg Ala Gly Ala
 165 170 175

Pro Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
 180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Thr Pro Gly Glu Arg Gly
 195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Arg Gln Arg
 210 215 220

Val Gly Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
 225 230 235 240

Gln Tyr Lys Lys Ala Met Leu Phe Pro Asn Gly Arg Ser Val Gly Glu
 245 250 255

Lys Ile Phe Lys Thr Val Gly Ser Glu Lys Thr Phe Gln Asp Ala Gln
 260 265 270

Gln Ile Cys Thr Gln Ala Gly Gly Gln Leu Pro Ser Pro Arg Ser Gly
 275 280 285

Ala Glu Asn Glu Ala Leu Thr Gln Leu Ala Thr Ala Gln Asn Lys Ala
 290 295 300

Ala Phe Leu Ser Met Ser Asp Thr Arg Lys Glu Gly Thr Phe Ile Tyr
 305 310 315 320

Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp Ala Pro Gln Glu Pro
325 330 335

Asn Asn Asp Gly Gly Ser Glu Asn Cys Val Glu Ile Phe Pro Asn Gly
340 345 350

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
355 360 365

Phe

<210> 104
<211> 301
<212> PRT
<213> Bos taurus

<400> 104

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 105
<211> 2412
<212> PRT
<213> Homo sapiens

<400> 105

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser

35

40

45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Thr Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Ala Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg

500					505					510					
Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala
		515					520					525			
Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Leu	Ala	Pro
	530					535					540				
Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp
545					550					555					560
Val	Arg	Cys	Ser	Gly	Asn	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn
				565					570					575	
Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	Ser	Glu	Asp	Ala	Gly	Val	Ile
			580					585						590	
Cys	Ser	Gly	Pro	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly
		595					600					605			
Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly
	610					615					620				
Thr	Val	Cys	Asp	Asp	Ser	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys
625					630					635					640
Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg
				645					650					655	
Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser
			660					665					670		
Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	Asn	Asn	Gly	Trp	Leu	Ser
		675					680					685			
His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ala
	690					695					700				
Gln	Ser	Arg	Ser	Thr	Pro	Arg	Pro	Asp	Thr	Leu	Ser	Thr	Ile	Thr	Leu
705					710					715					720
Pro	Pro	Ser	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu	Thr	Leu	Arg	Leu	Val
				725					730					735	

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro

965

970

975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
 980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
 995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
 1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
 1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
 1040 1045 1050

Pro Ile Val Leu Asp Asp Ala Arg Cys Ser Gly His Glu Ser Tyr
 1055 1060 1065

Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
 1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
 1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
 1130 1135 1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
 1145 1150 1155

Ala Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
 1160 1165 1170

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 1175 1180 1185

Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His
1190						1195					1200			
Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly
1205						1210					1215			
Val	Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp
1220						1225					1230			
Thr	Trp	Pro	Thr	Ser	His	Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser
1235						1240					1245			
Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg
1250						1255					1260			
Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp
1265						1270					1275			
Tyr	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly
1280						1285					1290			
Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln
1295						1300					1305			
Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His
1310						1315					1320			
Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His
1325						1330					1335			
Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser
1340						1345					1350			
Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	His
1355						1360					1365			
Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val
1370						1375					1380			
Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg
1385						1390					1395			
Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp

1400		1405		1410
Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser				
1415		1420		1425
Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val				
1430		1435		1440
Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser				
1445		1450		1455
Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu				
1460		1465		1470
Asp Ala Gly Val Ile Cys Ser Ala Phe Gln Ser Gln Pro Thr Pro				
1475		1480		1485
Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser				
1490		1495		1500
Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys				
1505		1510		1515
Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val				
1520		1525		1530
Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg				
1535		1540		1545
Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln				
1550		1555		1560
Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys				
1565		1570		1575
Ser Gly His Glu Pro Tyr Leu Trp Ser Cys Pro His Asn Gly Trp				
1580		1585		1590
Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys				
1595		1600		1605
Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu				
1610		1615		1620

Thr	Thr	Asn	Leu	Pro	Ala	Leu	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu
1625						1630					1635			
Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Arg	Gly	Arg	Val
1640						1645					1650			
Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser
1655						1660					1665			
Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys
1670						1675					1680			
Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly
1685						1690					1695			
Ser	Gly	Pro	Ile	Val	Leu	Gly	Asp	Val	Arg	Cys	Ser	Gly	Asn	Glu
1700						1705					1710			
Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Lys	Gly	Trp	Leu	Thr	His	Asn
1715						1720					1725			
Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Thr	Gln
1730						1735					1740			
Ile	Asn	Ser	Thr	Thr	Thr	Asp	Trp	Trp	His	Pro	Thr	Thr	Thr	Thr
1745						1750					1755			
Thr	Ala	Arg	Pro	Ser	Ser	Asn	Cys	Gly	Gly	Phe	Leu	Phe	Tyr	Ala
1760						1765					1770			
Ser	Gly	Thr	Phe	Ser	Ser	Pro	Ser	Tyr	Pro	Ala	Tyr	Tyr	Pro	Asn
1775						1780					1785			
Asn	Ala	Lys	Cys	Val	Trp	Glu	Ile	Glu	Val	Asn	Ser	Gly	Tyr	Arg
1790						1795					1800			
Ile	Asn	Leu	Gly	Phe	Ser	Asn	Leu	Lys	Leu	Glu	Ala	His	His	Asn
1805						1810					1815			
Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp	Gly	Ser	Leu	Asn	Ser
1820						1825					1830			
Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp	Thr	Arg	Gln	Ile	Phe

1835						1840						1845			
Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His	Phe	Arg	Ser	Asp	Ile	
1850						1855					1860				
Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp	Tyr	Asn	Ser	Phe	Pro	
1865						1870					1875				
Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu	Asn	Ser	Ser	Tyr	Gly	
1880						1885					1890				
Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His	Gly	Gly	Thr	Trp	Gly	
1895						1900					1905				
Ala	Val	Cys	Asp	Asp	Ser	Trp	Thr	Ile	Gln	Glu	Ala	Glu	Val	Val	
1910						1915					1920				
Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val	Ser	Ala	Leu	Gly	Asn	
1925						1930					1935				
Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile	Thr	Leu	Asp	Asp	Val	
1940						1945					1950				
Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp	Gln	Cys	Arg	Asn	Arg	
1955						1960					1965				
Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg	Glu	Asp	Ala	Gly	Val	
1970						1975					1980				
Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro	Ala	Pro	Phe	Leu	Asn	
1985						1990					1995				
Ile	Thr	Arg	Pro	Asn	Asn	Tyr	Ser	Cys	Gly	Gly	Phe	Leu	Ser	Gln	
2000						2005					2010				
Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly	Asn	Tyr	Pro	
2015						2020					2025				
Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln	Asn	Asn	Tyr	
2030						2035					2040				
Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu	Gly	Gly	Cys	
2045						2050					2055				

Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr	Arg	Ser	Ser
2060						2065					2070			
Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly	Ser	Phe	Thr
2075						2080					2085			
Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser	Asp	His	Ser
2090						2095					2100			
Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser	Ser	Pro	Ser
2105						2110					2115			
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2120						2125					2130			
Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe	Ser	Ala	Ser
2135						2140					2145			
Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu	Cys	Arg	Pro
2150						2155					2160			
Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro	Tyr	Ser	Gly
2165						2170					2175			
Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile	Asp	Tyr	Ser
2180						2185					2190			
Asn	Leu	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile	Lys	Arg	Arg
2195						2200					2205			
Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu	Gln	Asn	Thr
2210						2215					2220			
Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile	His	Val	Ala
2225						2230					2235			
Asn	Asn	Thr	Ile	Gln	Val	Glu	Glu	Val	Gln	Tyr	Gly	Asn	Phe	Asp
2240						2245					2250			
Val	Asn	Ile	Ser	Phe	Tyr	Thr	Ser	Ser	Ser	Phe	Leu	Tyr	Pro	Val
2255						2260					2265			
Thr	Ser	Arg	Pro	Tyr	Tyr	Val	Asp	Leu	Asn	Gln	Asp	Leu	Tyr	Val

2270 2275 2280
 Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe Val
 2285 2290 2295
 Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser Leu
 2300 2305 2310
 Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr Tyr
 2315 2320 2325
 Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg Phe
 2330 2335 2340
 Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu Arg
 2345 2350 2355
 Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg Cys
 2360 2365 2370
 Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser Tyr
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 Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln Thr
 2390 2395 2400
 Pro Pro Arg Arg Glu Glu Glu Pro Arg
 2405 2410

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 <211> 2413
 <212> PRT
 <213> Homo sapiens

 <400> 106

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 Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
 20 25 30

 Leu Ile Pro Ser Glu Val Pro Leu Asp Gln Thr Val Ala Glu Gly Ser
 35 40 45

Pro Phe Pro Ser Glu Ser Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
610 615 620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
1040 1045 1050

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
1055 1060 1065

Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
1130 1135 1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
1145 1150 1155

Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
1160 1165 1170

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
1175 1180 1185

Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
1190 1195 1200

Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly
1205						1210					1215			
Val	Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp
1220						1225					1230			
Thr	Trp	Pro	Thr	Ser	His	Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser
1235						1240					1245			
Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg
1250						1255					1260			
Val	Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp
1265						1270					1275			
Tyr	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly
1280						1285					1290			
Cys	Gly	Trp	Ala	Thr	Ser	Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln
1295						1300					1305			
Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His
1310						1315					1320			
Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His
1325						1330					1335			
Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser
1340						1345					1350			
Gln	Ser	Gln	Pro	Thr	Pro	Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	His
1355						1360					1365			
Ala	Ser	Thr	Ala	Gly	Ser	Glu	Ser	Ser	Leu	Ala	Leu	Arg	Leu	Val
1370						1375					1380			
Asn	Gly	Gly	Asp	Arg	Cys	Gln	Gly	Arg	Val	Glu	Val	Leu	Tyr	Arg
1385						1390					1395			
Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp
1400						1405					1410			

Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Thr	Ser
1415						1420					1425			
Ala	Pro	Gly	Asn	Ala	Arg	Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val
1430						1435					1440			
Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser
1445						1450					1455			
Cys	Pro	His	Asn	Gly	Trp	Leu	Ser	His	Asn	Cys	Gly	His	His	Glu
1460						1465					1470			
Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Ser	Gln	Ser	Gln	Pro	Thr	Pro
1475						1480					1485			
Ser	Pro	Asp	Thr	Trp	Pro	Thr	Ser	Arg	Ala	Ser	Thr	Ala	Gly	Ser
1490						1495					1500			
Glu	Ser	Thr	Leu	Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys
1505						1510					1515			
Arg	Gly	Arg	Val	Glu	Val	Leu	Tyr	Gln	Gly	Ser	Trp	Gly	Thr	Val
1520						1525					1530			
Cys	Asp	Asp	Tyr	Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg
1535						1540					1545			
Gln	Leu	Gly	Cys	Gly	Trp	Ala	Met	Ser	Ala	Pro	Gly	Asn	Ala	Gln
1550						1555					1560			
Phe	Gly	Gln	Gly	Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys
1565						1570					1575			
Ser	Gly	His	Glu	Ser	Tyr	Leu	Trp	Ser	Cys	Pro	His	Asn	Gly	Trp
1580						1585					1590			
Leu	Ser	His	Asn	Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys
1595						1600					1605			
Ser	Ala	Ala	Gln	Ser	Gln	Ser	Thr	Pro	Arg	Pro	Asp	Thr	Trp	Leu
1610						1615					1620			
Thr	Thr	Asn	Leu	Pro	Ala	Leu	Thr	Val	Gly	Ser	Glu	Ser	Ser	Leu
1625						1630					1635			

Ala	Leu	Arg	Leu	Val	Asn	Gly	Gly	Asp	Arg	Cys	Arg	Gly	Arg	Val
1640						1645					1650			
Glu	Val	Leu	Tyr	Arg	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp	Asp	Ser
1655						1660					1665			
Trp	Asp	Thr	Asn	Asp	Ala	Asn	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys
1670						1675					1680			
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1685						1690					1695			
Ser	Gly	Pro	Ile	Val	Leu	Asp	Asp	Val	Arg	Cys	Ser	Gly	Asn	Glu
1700						1705					1710			
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1715						1720					1725			
Cys	Gly	His	His	Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Ala	Thr	Gln
1730						1735					1740			
Ile	Asn	Ser	Thr	Thr	Thr	Asp	Trp	Trp	His	Pro	Thr	Thr	Thr	Thr
1745						1750					1755			
Thr	Ala	Arg	Pro	Ser	Ser	Asn	Cys	Gly	Gly	Phe	Leu	Phe	Tyr	Ala
1760						1765					1770			
Ser	Gly	Thr	Phe	Ser	Ser	Pro	Ser	Tyr	Pro	Ala	Tyr	Tyr	Pro	Asn
1775						1780					1785			
Asn	Ala	Lys	Cys	Val	Trp	Glu	Ile	Glu	Val	Asn	Ser	Gly	Tyr	Arg
1790						1795					1800			
Ile	Asn	Leu	Gly	Phe	Ser	Asn	Leu	Lys	Leu	Glu	Ala	His	His	Asn
1805						1810					1815			
Cys	Ser	Phe	Asp	Tyr	Val	Glu	Ile	Phe	Asp	Gly	Ser	Leu	Asn	Ser
1820						1825					1830			
Ser	Leu	Leu	Leu	Gly	Lys	Ile	Cys	Asn	Asp	Thr	Arg	Gln	Ile	Phe
1835						1840					1845			

Thr	Ser	Ser	Tyr	Asn	Arg	Met	Thr	Ile	His	Phe	Arg	Ser	Asp	Ile
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Ser	Phe	Gln	Asn	Thr	Gly	Phe	Leu	Ala	Trp	Tyr	Asn	Ser	Phe	Pro
1865						1870					1875			
Ser	Asp	Ala	Thr	Leu	Arg	Leu	Val	Asn	Leu	Asn	Ser	Ser	Tyr	Gly
1880						1885					1890			
Leu	Cys	Ala	Gly	Arg	Val	Glu	Ile	Tyr	His	Gly	Gly	Thr	Trp	Gly
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Cys	Arg	Gln	Leu	Gly	Cys	Gly	Arg	Ala	Val	Ser	Ala	Leu	Gly	Asn
1925						1930					1935			
Ala	Tyr	Phe	Gly	Ser	Gly	Ser	Gly	Pro	Ile	Thr	Leu	Asp	Asp	Val
1940						1945					1950			
Glu	Cys	Ser	Gly	Thr	Glu	Ser	Thr	Leu	Trp	Gln	Cys	Arg	Asn	Arg
1955						1960					1965			
Gly	Trp	Phe	Ser	His	Asn	Cys	Asn	His	Arg	Glu	Asp	Ala	Gly	Val
1970						1975					1980			
Ile	Cys	Ser	Gly	Asn	His	Leu	Ser	Thr	Pro	Ala	Pro	Phe	Leu	Asn
1985						1990					1995			
Ile	Thr	Arg	Pro	Asn	Thr	Asp	Tyr	Ser	Cys	Gly	Gly	Phe	Leu	Ser
2000						2005					2010			
Gln	Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly	Asn	Tyr
2015						2020					2025			
Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln	Asn	Asn
2030						2035					2040			
Tyr	Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu	Gly	Gly
2045						2050					2055			
Cys	Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr	Arg	Ser
2060						2065					2070			

Ser	Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly	Ser	Phe
2075						2080					2085			
Thr	Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser	Asp	His
2090						2095					2100			
Ser	Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser	Ser	Pro
2105						2110					2115			
Ser	Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu	Pro	Asn	His	Met	Gln
2120						2125					2130			
Ala	Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe	Ser	Ala
2135						2140					2145			
Ser	Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu	Cys	Arg
2150						2155					2160			
Pro	Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro	Tyr	Ser
2165						2170					2175			
Gly	Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile	Asp	Tyr
2180						2185					2190			
Ser	Asn	Phe	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile	Lys	Arg
2195						2200					2205			
Arg	Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu	Gln	Asn
2210						2215					2220			
Thr	Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile	His	Val
2225						2230					2235			
Ala	Asn	Asn	Thr	Ile	Gln	Val	Glu	Glu	Val	Gln	Tyr	Gly	Asn	Phe
2240						2245					2250			
Asp	Val	Asn	Ile	Ser	Phe	Tyr	Thr	Ser	Ser	Ser	Phe	Leu	Tyr	Pro
2255						2260					2265			
Val	Thr	Ser	Arg	Pro	Tyr	Tyr	Val	Asp	Leu	Asn	Gln	Asp	Leu	Tyr
2270						2275					2280			

Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe
2285 2290 2295

Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser
2300 2305 2310

Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr
2315 2320 2325

Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg
2330 2335 2340

Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu
2345 2350 2355

Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg
2360 2365 2370

Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser
2375 2380 2385

Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln
2390 2395 2400

Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
2405 2410

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<211> 374
<212> PRT
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<400> 107

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Thr Cys Thr Leu Val Met Cys Ser Pro Thr Glu Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly Asp
50 55 60

Pro Gly Leu Pro Gly Pro Met Gly Leu Ser Gly Leu Gln Gly Pro Thr
65 70 75 80

Gly Pro Val Gly Pro Lys Gly Glu Asn Gly Ser Ala Gly Glu Pro Gly
85 90 95

Pro Lys Gly Glu Arg Gly Leu Ser Gly Pro Pro Gly Leu Pro Gly Ile
100 105 110

Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Lys Gln Gly Asn Ile
115 120 125

Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys Gly
130 135 140

Glu Val Gly Ala Pro Gly Met Gln Gly Ser Thr Gly Ala Lys Gly Ser
145 150 155 160

Thr Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly Val Gln Gly Ala Pro
165 170 175

Gly Asn Ala Gly Ala Ala Gly Pro Ala Gly Pro Ala Gly Pro Gln Gly
180 185 190

Ala Pro Gly Ser Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Val
195 200 205

Pro Gly Asp Arg Gly Ile Lys Gly Glu Ser Gly Leu Pro Asp Ser Ala
210 215 220

Ala Leu Arg Gln Gln Met Glu Ala Leu Lys Gly Lys Leu Gln Arg Leu
225 230 235 240

Glu Val Ala Phe Ser His Tyr Gln Lys Ala Ala Leu Phe Pro Asp Gly
245 250 255

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr

290

295

300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu
305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 108
<211> 35
<212> PRT
<213> Canis familiaris

<400> 108

Leu Gly Ile Pro Cys Phe Pro Ser Ser Leu Lys Arg Leu Leu Ile Ile
1 5 10 15

Val Val Val Ile Val Leu Val Val Val Val Ile Val Gly Ala Leu Leu
20 25 30

Met Gly Leu
35

<210> 109
<211> 34
<212> PRT
<213> Bos taurus

<400> 109

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val
1 5 10 15

Val Val Val Val Leu Leu Val Val Val Ile Val Gly Ala Leu Leu Met
20 25 30

Gly Leu

<210> 110
<211> 35
<212> PRT
<213> Homo sapiens

<400> 110

Gly Gln Ser Ile Thr Phe Asp Ala Gly Lys Glu Gln Cys Val Glu Met
1 5 10 15

Tyr Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Leu Tyr Leu Thr Ile
20 25 30

Cys Glu Phe
35

<210> 111
<211> 370
<212> PRT
<213> Oryctolagus cuniculus

<400> 111

Met Ala Lys Ser His Leu Pro Pro Trp Leu Leu Leu Leu Leu Leu Pro
1 5 10 15

Thr Leu Cys Gly Pro Gly Thr Ala Val Trp Ala Thr Ser Pro Leu Ala
20 25 30

Cys Ala Gln Gly Pro Glu Phe Trp Cys Gln Ser Leu Glu Gln Ala Leu
35 40 45

Gln Cys Lys Ala Leu Gly His Cys Leu Gln Glu Val Trp Gly His Val
50 55 60

Gly Ala Asp Asp Leu Cys Gln Glu Cys Gln Asp Ile Val Asn Ile Leu
65 70 75 80

Thr Lys Met Thr Lys Glu Ala Ile Phe Gln Asp Thr Ile Arg Lys Phe
85 90 95

Leu Glu His Glu Cys Asp Val Leu Pro Leu Lys Leu Leu Val Pro Gln
100 105 110

Cys His His Val Leu Asp Val Tyr Phe Pro Leu Thr Ile Thr Tyr Phe

115							120						125			
Leu	Ser	Gln	Ile	Asn	Ala	Lys	Ala	Ile	Cys	Gln	His	Leu	Gly	Leu	Cys	
130						135					140					
Gln	Pro	Gly	Ser	Pro	Glu	Pro	Pro	Leu	Asp	Pro	Leu	Pro	Asp	Lys	Leu	
145					150					155					160	
Val	Leu	Pro	Thr	Leu	Leu	Gly	Ala	Leu	Pro	Ala	Lys	Pro	Gly	Pro	His	
				165					170					175		
Thr	Gln	Asp	Leu	Ser	Ala	Gln	Arg	Phe	Pro	Ile	Pro	Leu	Pro	Leu	Cys	
			180					185					190			
Trp	Leu	Cys	Arg	Thr	Leu	Leu	Lys	Arg	Ile	Gln	Ala	Met	Ile	Pro	Lys	
		195					200					205				
Gly	Val	Leu	Ala	Met	Ala	Val	Ala	Gln	Val	Cys	His	Val	Val	Pro	Leu	
210						215					220					
Val	Val	Gly	Gly	Ile	Cys	Gln	Cys	Leu	Ala	Glu	Arg	Tyr	Thr	Val	Ile	
225					230					235					240	
Leu	Leu	Glu	Val	Leu	Leu	Gly	His	Val	Leu	Pro	Gln	Leu	Val	Cys	Gly	
				245					250					255		
Leu	Val	Leu	Arg	Cys	Ser	Ser	Val	Asp	Ser	Ile	Gly	Gln	Val	Pro	Pro	
			260					265					270			
Thr	Leu	Glu	Ala	Leu	Pro	Gly	Glu	Trp	Leu	Pro	Gln	Asp	Pro	Glu	Cys	
		275					280					285				
Pro	Leu	Cys	Met	Ser	Val	Thr	Thr	Gln	Ala	Arg	Asn	Ile	Ser	Glu	Gln	
290						295					300					
Thr	Arg	Pro	Gln	Ala	Val	Tyr	His	Ala	Cys	Leu	Ser	Ser	Gln	Leu	Asp	
305					310					315					320	
Lys	Gln	Glu	Cys	Glu	Gln	Phe	Val	Glu	Leu	His	Thr	Pro	Gln	Leu	Leu	
				325					330					335		
Ser	Leu	Leu	Ser	Arg	Gly	Trp	Asp	Ala	Arg	Ala	Ile	Cys	Gln	Ala	Leu	
			340					345					350			

Gly Ala Cys Val Ala Thr Leu Ser Pro Leu Gln Cys Ile Gln Ser Pro
355 360 365

His Phe
370

<210> 112
<211> 247
<212> PRT
<213> *Oryctolagus cuniculus*

<400> 112

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro
20 25 30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
35 40 45

Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Ile Val Lys Glu Val Pro Arg Ser Leu Glu Glu Asn Glu Ala
165 170 175

Ile Ala Ser Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 113
<211> 369
<212> PRT
<213> Bos taurus

<400> 113

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro

115								120								125
Pro	Gly	Thr	Pro	Gly	Pro	Lys	Gly	Asp	Thr	Gly	Pro	Lys	Gly	Gly	Val	
130						135					140					
Gly	Ala	Pro	Gly	Ile	Gln	Gly	Ser	Pro	Gly	Pro	Ala	Gly	Leu	Lys	Gly	
145					150					155					160	
Glu	Arg	Gly	Ala	Pro	Gly	Glu	Pro	Gly	Ala	Pro	Gly	Arg	Ala	Gly	Ala	
				165					170						175	
Pro	Gly	Pro	Ala	Gly	Ala	Ile	Gly	Pro	Gln	Gly	Pro	Ser	Gly	Ala	Arg	
			180					185					190			
Gly	Pro	Pro	Gly	Leu	Lys	Gly	Asp	Arg	Gly	Thr	Pro	Gly	Glu	Arg	Gly	
	195						200					205				
Ala	Lys	Gly	Glu	Ser	Gly	Leu	Ala	Glu	Val	Asn	Ala	Leu	Arg	Gln	Arg	
210						215					220					
Val	Gly	Ile	Leu	Glu	Gly	Gln	Leu	Gln	Arg	Leu	Gln	Asn	Ala	Phe	Ser	
225					230					235					240	
Gln	Tyr	Lys	Lys	Ala	Met	Leu	Phe	Pro	Asn	Gly	Arg	Ser	Val	Gly	Glu	
				245					250					255		
Lys	Ile	Phe	Lys	Thr	Val	Gly	Ser	Glu	Lys	Thr	Phe	Gln	Asp	Ala	Gln	
			260					265					270			
Gln	Ile	Cys	Thr	Gln	Ala	Gly	Gly	Gln	Leu	Pro	Ser	Pro	Arg	Ser	Gly	
		275					280					285				
Ala	Glu	Asn	Glu	Ala	Leu	Thr	Gln	Leu	Ala	Thr	Ala	Gln	Asn	Lys	Ala	
290						295					300					
Ala	Phe	Leu	Ser	Met	Ser	Asp	Thr	Arg	Lys	Glu	Gly	Thr	Phe	Ile	Tyr	
305					310					315					320	
Pro	Thr	Gly	Glu	Pro	Leu	Val	Tyr	Ser	Asn	Trp	Ala	Pro	Gln	Glu	Pro	
				325					330					335		
Asn	Asn	Asp	Gly	Gly	Ser	Glu	Asn	Cys	Val	Glu	Ile	Phe	Pro	Asn	Gly	
			340					345					350			

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
355 360 365

Phe

<210> 114
<211> 301
<212> PRT
<213> Bos taurus

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Unknown

<400> 114

Glu Glu Met Asp Val Tyr Xaa Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 115
<211> 375
<212> PRT
<213> Homo sapiens

<400> 115

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Thr Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
 50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
 65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
 85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
 100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Pro Leu Gly Lys Gln Gly Asn
 115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
 130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
 145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
 165 170 175

Pro Gly Asn Ala Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
 180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
 195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
 210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
 225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
 245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
 260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu

275

280

285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
 290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
 305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
 325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
 340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
 355 360 365

Arg Leu Val Val Cys Glu Phe
 370 375

<210> 116

<211> 194

<212> PRT

<213> Rattus norvegicus

<400> 116

Met Asp Met Gly Ser Lys Glu Val Leu Met Glu Ser Pro Pro Asp Tyr
 1 5 10 15

Ser Thr Gly Pro Arg Ser Gln Phe Arg Ile Pro Cys Cys Pro Val His
 20 25 30

Leu Lys Arg Leu Leu Ile Val Val Val Val Val Leu Val Val Val
 35 40 45

Val Ile Val Gly Ala Leu Leu Met Gly Leu His Met Ser Gln Lys His
 50 55 60

Thr Glu Met Val Leu Glu Met Ser Ile Gly Gly Ala Pro Glu Thr Gln
 65 70 75 80

Lys Arg Leu Ala Leu Ser Glu His Thr Asp Thr Ile Ala Thr Phe Ser
 85 90 95

Ile Gly Ser Thr Gly Ile Val Leu Tyr Asp Tyr Gln Arg Leu Leu Thr
100 105 110

Ala Tyr Lys Pro Ala Pro Gly Thr Tyr Cys Tyr Ile Met Lys Met Ala
115 120 125

Pro Glu Ser Ile Pro Ser Leu Glu Ala Leu Ala Arg Lys Phe Lys Asn
130 135 140

Phe Gln Ala Lys Ser Ser Thr Pro Thr Ser Lys Leu Gly Gln Glu Glu
145 150 155 160

Gly His Ser Ala Gly Ser Asp Ser Asp Ser Ser Gly Arg Asp Leu Ala
165 170 175

Phe Leu Gly Leu Ala Val Ser Thr Leu Cys Gly Val Leu Pro Leu Tyr
180 185 190

Tyr Ile

<210> 117
<211> 247
<212> PRT
<213> *Oryctolagus cuniculus*

<400> 117

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro
20 25 30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
35 40 45

Val Lys Gly Asp Pro Gly Pro Pro Ala Pro Trp Ala Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Val Pro Arg Ser Leu Glu Glu Asn Glu Ala Ile Ala Ser Ile
165 170 175

Val Lys Glu Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 118
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (25)..(130)
<223> Polypeptide sequence from ficolin dom aa131

<220>
<221> MISC_FEATURE
<222> (131)..(251)
<223> Polypeptide sequence from MBL aa129

<400> 118

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Phe Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr
130 135 140

Asn Gly Glu Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys
145 150 155 160

Phe Gln Ala Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala
165 170 175

Ile Gln Asn Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu
180 185 190

Lys Thr Glu Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr
195 200 205

Thr Asn Trp Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp
210 215 220

Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser

225 230 235 240

Thr Ser His Leu Ala Val Cys Glu Phe Pro Ile
245 250

<210> 119
<211> 329
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (25)..(206)
<223> Polypeptide sequence from ficolin-dom. containing pred. coil-coil
to aa207

<220>
<221> MISC_FEATURE
<222> (207)..(329)
<223> Polypeptide sequence from MBL

<400> 119

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val
130 135 140

Phe Gln Arg Arg Val Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala
145 150 155 160

Thr Tyr Lys Gln Gly Phe Gly Ser Arg Leu Gly Glu Phe Trp Leu Gly
165 170 175

Asn Asp Asn Ile His Ala Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg
180 185 190

Val Asp Leu Val Asp Phe Glu Asp Asn Tyr Gln Phe Ala Lys Leu Thr
195 200 205

Phe Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly
210 215 220

Glu Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln
225 230 235 240

Ala Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln
245 250 255

Asn Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr
260 265 270

Glu Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn
275 280 285

Trp Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val
290 295 300

Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser
305 310 315 320

His Leu Ala Val Cys Glu Phe Pro Ile
325

<210> 120
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (25)..(91)
<223> Polypeptide sequence from collagen

<220>
<221> MISC_FEATURE
<222> (92)..(240)
<223> Polypeptide sequence from MBL

<400> 120

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Pro Asp Gly Asp
85 90 95

Ser Ser Leu Ala Ala Ser Glu Arg Lys Ala Leu Gln Thr Glu Met Ala
100 105 110

Arg Ile Lys Lys Trp Leu Thr Phe Ser Leu Gly Lys Gln Val Gly Asn
115 120 125

Lys Phe Phe Leu Thr Asn Gly Glu Ile Met Thr Phe Glu Lys Val Lys
130 135 140

Ala Leu Cys Val Lys Phe Gln Ala Ser Val Ala Thr Pro Arg Asn Ala
145 150 155 160

Ala Glu Asn Gly Ala Ile Gln Asn Leu Ile Lys Glu Glu Ala Phe Leu
165 170 175

Gly Ile Thr Asp Glu Lys Thr Glu Gly Gln Phe Val Asp Leu Thr Gly
180 185 190

Asn Arg Leu Thr Tyr Thr Asn Trp Asn Glu Gly Glu Pro Asn Asn Ala
195 200 205

Gly Ser Asp Glu Asp Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn
210 215 220

Asp Val Pro Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe Pro Ile
225 230 235 240

<210> 121
<211> 255
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (25)..(82)
<223> Polypeptide sequence from collagen to cons.K at aa 93

<220>
<221> MISC_FEATURE
<222> (83)..(255)
<223> Polypeptide sequence from MBL

<400> 121

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Leu Gly Pro Pro Gly Asn Pro Gly Pro Ser Gly Ser Pro Gly
85 90 95

Pro Lys Gly Gln Lys Gly Asp Pro Gly Lys Ser Pro Asp Gly Asp Ser
100 105 110

Ser Leu Ala Ala Ser Glu Arg Lys Ala Leu Gln Thr Glu Met Ala Arg
115 120 125

Ile Lys Lys Trp Leu Thr Phe Ser Leu Gly Lys Gln Val Gly Asn Lys
130 135 140

Phe Phe Leu Thr Asn Gly Glu Ile Met Thr Phe Glu Lys Val Lys Ala
145 150 155 160

Leu Cys Val Lys Phe Gln Ala Ser Val Ala Thr Pro Arg Asn Ala Ala
165 170 175

Glu Asn Gly Ala Ile Gln Asn Leu Ile Lys Glu Glu Ala Phe Leu Gly
180 185 190

Ile Thr Asp Glu Lys Thr Glu Gly Gln Phe Val Asp Leu Thr Gly Asn
195 200 205

Arg Leu Thr Tyr Thr Asn Trp Asn Glu Gly Glu Pro Asn Asn Ala Gly
210 215 220

Ser Asp Glu Asp Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp
225 230 235 240

Val Pro Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe Pro Ile
245 250 255

<210> 122
<211> 254
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (25)..(69)
<223> Polypeptide sequence from collagen

<220>
<221> MISC_FEATURE
<222> (70)..(254)
<223> Polypeptide sequence from MBL

<400> 122

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly
65 70 75 80

Lys Leu Gly Pro Pro Gly Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro
85 90 95

Lys Gly Gln Lys Gly Asp Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser
100 105 110

Leu Ala Ala Ser Glu Arg Lys Ala Leu Gln Thr Glu Met Ala Arg Ile
115 120 125

Lys Lys Trp Leu Thr Phe Ser Leu Gly Lys Gln Val Gly Asn Lys Phe
130 135 140

Phe Leu Thr Asn Gly Glu Ile Met Thr Phe Glu Lys Val Lys Ala Leu
145 150 155 160

Cys Val Lys Phe Gln Ala Ser Val Ala Thr Pro Arg Asn Ala Ala Glu
165 170 175

Asn Gly Ala Ile Gln Asn Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile
180 185 190

Thr Asp Glu Lys Thr Glu Gly Gln Phe Val Asp Leu Thr Gly Asn Arg
195 200 205

Leu Thr Tyr Thr Asn Trp Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser
210 215 220

Asp Glu Asp Cys Val Leu Leu Lys Asn Gly Gln Trp Asn Asp Val
225 230 235 240

Pro Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe Pro Ile
245 250

<210> 123
<211> 232
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (21)..(41)
<223> Polypeptide sequence from MBL collagen

<220>
<221> MISC_FEATURE
<222> (42)..(232)
<223> Polypeptide sequence from collagen

<400> 123

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Cys Pro Gly Leu Pro Gly
35 40 45

Ala Pro Gly Asp Lys Gly Glu Ala Gly Thr Asn Gly Lys Arg Gly Glu
50 55 60

Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly Pro Pro Gly Pro Asn
65 70 75 80

Gly Ala Pro Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
85 90 95

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
100 105 110

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
115 120 125

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
130 135 140

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
145 150 155 160

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
165 170 175

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
180 185 190

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
195 200 205

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
210 215 220

Leu Ala Val Cys Glu Phe Pro Ile
225 230

<210> 124
<211> 237
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (21)..(89)
<223> Polypeptide sequence from collagen

<220>
<221> MISC_FEATURE
<222> (90)..(237)
<223> Polypeptide sequence from MBL

<400> 124

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Ala Leu Gln Ala Ala Asp Thr Cys Pro Glu Val Lys
20 25 30

Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile Leu Arg Gly Cys
35 40 45

Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu Ala Gly Thr Asn
50 55 60

Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly
65 70 75 80

Pro Pro Gly Pro Asn Gly Ala Pro Ser Pro Asp Gly Asp Ser Ser Leu
85 90 95

Ala Ala Ser Glu Arg Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys
100 105 110

Lys Trp Leu Thr Phe Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe
115 120 125

Leu Thr Asn Gly Glu Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys
130 135 140

Val Lys Phe Gln Ala Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn
145 150 155 160

Gly Ala Ile Gln Asn Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr
165 170 175

Asp Glu Lys Thr Glu Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu
180 185 190

Thr Tyr Thr Asn Trp Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp
195 200 205

Glu Asp Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro
210 215 220

Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe Pro Ile
225 230 235

<210> 125
<211> 288
<212> PRT
<213> Homo sapiens

<400> 125

Leu Gln Ala Ala Asp Thr Cys Pro Glu Val Lys Met Val Gly Leu Glu
1 5 10 15

Gly Ser Asp Lys Leu Thr Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly
20 25 30

Ala Pro Gly Asp Lys Gly Glu Ala Gly Thr Asn Gly Lys Arg Gly Glu
35 40 45

Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly Pro Pro Gly Pro Asn
50 55 60

Gly Ala Pro Gly Glu Pro Gln Pro Cys Leu Thr Gly Pro Arg Thr Cys
65 70 75 80

Lys Asp Leu Leu Asp Arg Gly His Phe Leu Ser Gly Trp His Thr Ile
85 90 95

Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Thr
100 105 110

Asp Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Val
115 120 125

Asp Phe Tyr Arg Asp Trp Ala Thr Tyr Lys Gln Gly Phe Gly Ser Arg
130 135 140

Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala Leu Thr Ala
145 150 155 160

Gln Gly Thr Ser Glu Leu Arg Val Asp Leu Val Asp Phe Glu Asp Asn
165 170 175

Tyr Gln Phe Ala Lys Tyr Arg Ser Phe Lys Val Ala Asp Glu Ala Glu
180 185 190

Lys Tyr Asn Leu Val Leu Gly Ala Phe Val Glu Gly Ser Ala Gly Asp
195 200 205

Ser Leu Thr Phe His Asn Asn Gln Ser Phe Ser Thr Lys Asp Gln Asp
210 215 220

Asn Asp Leu Asn Thr Gly Asn Cys Ala Val Met Phe Gln Gly Ala Trp
225 230 235 240

Trp Tyr Lys Asn Cys His Val Ser Asn Leu Asn Gly Arg Tyr Leu Arg
245 250 255

Gly Thr His Gly Ser Phe Ala Asn Gly Ile Asn Trp Lys Ser Gly Lys

260

265

270

Gly Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Val Arg Pro Ala
 275 280 285

<210> 126

<211> 228

<212> PRT

<213> Homo sapiens

<400> 126

Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys Pro Ala Val Ile
 1 5 10 15

Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly Lys Asp Gly Arg
 20 25 30

Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
 35 40 45

Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly Asn Pro Gly Pro
 50 55 60

Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp Pro Gly Lys Ser
 65 70 75 80

Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg Lys Ala Leu Gln
 85 90 95

Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe Ser Leu Gly Lys
 100 105 110

Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu Ile Met Thr Phe
 115 120 125

Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala Ser Val Ala Thr
 130 135 140

Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn Leu Ile Lys Glu
 145 150 155 160

Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu Gly Gln Phe Val
 165 170 175

Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp Asn Glu Gly Glu
180 185 190

Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu Leu Leu Lys Asn
195 200 205

Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His Leu Ala Val Cys
210 215 220

Glu Phe Pro Ile
225

<210> 127
<211> 216
<212> PRT
<213> Homo sapiens

<400> 127

Leu Gln Ala Ala Asp Thr Cys Pro Glu Val Lys Met Val Gly Leu Glu
1 5 10 15

Gly Ser Asp Lys Leu Thr Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly
20 25 30

Ala Pro Gly Asp Lys Gly Glu Ala Gly Thr Asn Gly Lys Arg Gly Glu
35 40 45

Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly Pro Pro Gly Pro Asn
50 55 60

Gly Ala Pro Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
65 70 75 80

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
85 90 95

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
100 105 110

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
115 120 125

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
130 135 140

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
145 150 155 160

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
165 170 175

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
180 185 190

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
195 200 205

Leu Ala Val Cys Glu Phe Pro Ile
210 215

<210> 128
<211> 299
<212> PRT
<213> Homo sapiens

<400> 128

Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Leu Gly
1 5 10 15

Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro Gly Pro
20 25 30

Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser Cys Pro Gly
35 40 45

Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly Pro Gln Gly Pro
50 55 60

Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly Glu Pro Gly Asp Pro
65 70 75 80

Val Asn Leu Leu Arg Cys Gln Glu Gly Pro Arg Asn Cys Arg Glu Leu
85 90 95

Leu Ser Gln Gly Ala Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro
100 105 110

Glu Gly Arg Ala Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly
115 120 125

Gly Trp Leu Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe
130 135 140

Arg Ser Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu
145 150 155 160

Phe Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn
165 170 175

Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr Phe
180 185 190

Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His Tyr Gln
195 200 205

Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp Ser Leu Ser
210 215 220

Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala Asp His Asp Ser
225 230 235 240

Ser Asn Ser Asn Cys Ala Val Ile Val His Gly Ala Trp Trp Tyr Ala
245 250 255

Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg Tyr Ala Val Ser Asp Ala
260 265 270

Ala Ala His Lys Tyr Gly Ile Asp Trp Ala Ser Gly Arg Gly Val Gly
275 280 285

His Pro Tyr Arg Arg Val Arg Met Met Leu Arg
290 295

<210> 129
<211> 169
<212> PRT
<213> Homo sapiens

<400> 129

Met Gly Pro Ala Leu Leu Ala Leu Ser Phe Leu Trp Thr Met Ala Leu
1 5 10 15

Thr Glu Asp Thr Cys Pro Ala Met Leu Glu Tyr Val Ala Leu Asn Ser

	20		25		30										
Glu	Pro	Gly	Met	Ala	Ser	Lys	Asn	Pro	Ser	Arg	Arg	His	Gly	Leu	Ser
		35					40					45			
Leu	Leu	Val	Val	Asp	Gln	Gly	Pro	Gly	Ala	Arg	Gly	Val	Arg	Thr	Asp
	50					55					60				
Gln	Gly	Pro	Ser	Gly	Ala	Asp	Pro	Gly	Ser	Leu	Glu	Leu	His	Gly	Glu
65					70					75					80
Cys	Pro	Ile	Phe	Pro	Ser	Glu	Gln	Val	Ile	Leu	Thr	His	His	Asn	Asn
				85					90					95	
Tyr	Pro	Phe	Ser	Thr	Glu	Asp	Gln	Asp	Asn	Asp	Arg	Asp	Ala	Glu	Asn
			100					105						110	
Cys	Ala	Val	His	Tyr	Gln	Gly	Ala	Trp	Trp	Tyr	Ala	Ser	Cys	His	Leu
		115					120					125			
Ser	His	Leu	Asn	Gly	Val	Tyr	Leu	Gly	Gly	Ala	Arg	Asp	Ser	Phe	Thr
	130					135					140				
Asn	Gly	Ile	Asn	Trp	Lys	Ser	Gly	Lys	Gly	Asn	Asn	Tyr	Ser	Tyr	Lys
145					150					155					160
Val	Ser	Glu	Met	Lys	Val	Arg	Pro	Thr							
				165											

<210> 130
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 130

Met	Glu	Leu	Ser	Gly	Ala	Thr	Met	Ala	Arg	Gly	Leu	Ala	Val	Leu	Leu
1				5					10					15	
Val	Leu	Phe	Leu	His	Ile	Lys	Asn	Leu	Pro	Ala	Gln	Ala	Ala	Asp	Thr
			20					25					30		
Cys	Pro	Glu	Val	Lys	Val	Val	Gly	Leu	Glu	Gly	Ser	Asp	Lys	Leu	Thr
		35					40					45			

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala
65 70 75 80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys
165 170 175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Asn Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 131
<211> 299
<212> PRT
<213> Homo sapiens

<400> 131

Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Leu Gly
1 5 10 15

Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro Gly Pro
20 25 30

Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser Cys Pro Gly
35 40 45

Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly Pro Gln Gly Pro
50 55 60

Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly Glu Pro Gly Asp Pro
65 70 75 80

Val Asn Leu Leu Arg Cys Gln Glu Gly Pro Arg Asn Cys Arg Glu Leu
85 90 95

Leu Ser Gln Gly Ala Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro
100 105 110

Glu Gly Arg Ala Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly
115 120 125

Gly Trp Leu Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe
130 135 140

Arg Ser Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu

145 150 155 160

Phe Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn
165 170 175

Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr Phe
180 185 190

Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His Tyr Gln
195 200 205

Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp Ser Leu Ser
210 215 220

Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala Asp His Asp Ser
225 230 235 240

Ser Asn Ser Asn Cys Ala Val Ile Val His Gly Ala Trp Trp Tyr Ala
245 250 255

Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg Tyr Ala Val Ser Asp Ala
260 265 270

Ala Ala His Lys Tyr Gly Ile Asp Trp Ala Ser Gly Arg Gly Val Gly
275 280 285

His Pro Tyr Arg Arg Val Arg Met Met Leu Arg
290 295

<210> 132
<211> 314
<212> PRT
<213> Mus musculus

<400> 132

Met Ala Leu Gly Ser Ala Ala Leu Phe Val Leu Thr Leu Thr Val His
1 5 10 15

Ala Ala Gly Thr Cys Pro Glu Leu Lys Val Leu Asp Leu Glu Gly Tyr
20 25 30

Lys Gln Leu Thr Ile Leu Gln Gly Cys Pro Gly Leu Pro Gly Ala Ala
35 40 45

Gly Pro Lys Gly Glu Ala Gly Ala Lys Gly Asp Arg Gly Glu Ser Gly
50 55 60

Leu Pro Gly Ile Pro Gly Lys Glu Gly Pro Thr Gly Pro Lys Gly Asn
65 70 75 80

Gln Gly Glu Lys Gly Ile Arg Gly Glu Lys Gly Asp Ser Gly Pro Ser
85 90 95

Gln Ser Cys Ala Thr Gly Pro Arg Thr Cys Lys Glu Leu Leu Thr Gln
100 105 110

Gly His Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu Pro Asp Cys Arg
115 120 125

Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr
130 135 140

Val Phe Gln Arg Arg Leu Asp Gly Ser Val Asp Phe Phe Arg Asp Trp
145 150 155 160

Thr Ser Tyr Lys Arg Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu
165 170 175

Gly Asn Asp Asn Ile His Ala Leu Thr Thr Gln Gly Thr Ser Glu Leu
180 185 190

Arg Val Asp Leu Ser Asp Phe Glu Gly Lys His Asp Phe Ala Lys Tyr
195 200 205

Ser Ser Phe Gln Ile Gln Gly Glu Ala Glu Lys Tyr Lys Leu Ile Leu
210 215 220

Gly Asn Phe Leu Gly Gly Gly Ala Gly Asp Ser Leu Thr Pro His Asn
225 230 235 240

Asn Arg Leu Phe Ser Thr Lys Asp Gln Asp Asn Asp Gly Ser Thr Ser
245 250 255

Ser Cys Ala Met Gly Tyr His Gly Ala Trp Trp Tyr Ser Gln Cys His
260 265 270

Thr Ser Asn Leu Asn Gly Leu Tyr Leu Arg Gly Pro His Lys Ser Tyr
275 280 285

Ala Asn Gly Val Asn Trp Lys Ser Trp Arg Gly Tyr Asn Tyr Ser Cys
290 295 300

Lys Val Ser Glu Met Lys Val Arg Leu Ile
305 310

<210> 133
<211> 102
<212> PRT
<213> Homo sapiens

<400> 133

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Asp
100

<210> 134
<211> 182
<212> PRT
<213> Homo sapiens

<400> 134

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val
130 135 140

Ser Val Gly Leu Gly Arg Gly Gly Gln Pro Gly Ser Pro Gly Gly Gln
145 150 155 160

Ala Ala His Leu Val Gly Glu His Thr Leu Glu Phe Ser Ile Leu Leu
165 170 175

Val Gly Asp Ser Gln Arg
180

<210> 135
<211> 275
<212> PRT
<213> Homo sapiens

<400> 135

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Gly Glu Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly Pro Pro

35

40

45

Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln Pro Cys Leu Thr Gly Pro
50 55 60

Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly His Phe Leu Ser Gly Trp
65 70 75 80

His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp
85 90 95

Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp
100 105 110

Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Thr Tyr Lys Gln Gly Phe
115 120 125

Gly Ser Arg Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala
130 135 140

Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg Val Asp Leu Val Asp Phe
145 150 155 160

Glu Asp Asn Tyr Gln Phe Ala Lys Tyr Arg Ser Phe Lys Val Ala Asp
165 170 175

Glu Ala Glu Lys Tyr Asn Leu Val Leu Gly Ala Phe Val Glu Gly Ser
180 185 190

Ala Gly Asp Ser Leu Thr Phe His Asn Asn Gln Ser Phe Ser Thr Lys
195 200 205

Asp Gln Asp Asn Asp Leu Asn Thr Gly Asn Cys Ala Val Met Phe Gln
210 215 220

Gly Ala Trp Trp Tyr Lys Asn Cys His Val Ser Asn Leu Asn Gly Arg
225 230 235 240

Tyr Leu Arg Gly Thr His Gly Ser Phe Ala Asn Gly Ile Asn Trp Lys
245 250 255

Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Val
260 265 270

Arg Pro Ala
275

<210> 136
<211> 326
<212> PRT
<213> Homo Sapiens

<400> 136

Met Glu Leu Ser Gly Ala Thr Met Ala Arg Gly Leu Ala Val Leu Leu
1 5 10 15

Val Leu Phe Leu His Ile Lys Asn Leu Pro Ala Gln Ala Ala Asp Thr
20 25 30

Cys Pro Glu Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Thr
35 40 45

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala
65 70 75 80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys
165 170 175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Asn Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 137
<211> 313
<212> PRT
<213> Homo sapiens

<400> 137

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu

50

55

60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val
130 135 140

Phe Gln Arg Arg Val Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala
145 150 155 160

Thr Tyr Lys Gln Gly Phe Gly Ser Arg Leu Gly Glu Phe Trp Leu Gly
165 170 175

Asn Asp Asn Ile His Ala Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg
180 185 190

Val Asp Leu Val Asp Phe Glu Asp Asn Tyr Gln Phe Ala Lys Tyr Arg
195 200 205

Ser Phe Lys Val Ala Asp Glu Ala Glu Lys Tyr Asn Leu Val Leu Gly
210 215 220

Ala Phe Val Glu Gly Ser Ala Gly Asp Ser Leu Thr Phe His Asn Asn
225 230 235 240

Gln Ser Phe Ser Thr Lys Asp Gln Asp Asn Asp Leu Asn Thr Gly Asn
245 250 255

Cys Ala Val Met Phe Gln Gly Ala Trp Trp Tyr Lys Asn Cys His Val
260 265 270

Ser Asn Leu Asn Gly Arg Tyr Leu Arg Gly Thr His Gly Ser Phe Ala
275 280 285

Asn Gly Ile Asn Trp Lys Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys
290 295 300

Val Ser Glu Met Lys Val Arg Pro Ala
305 310

<210> 138
<211> 335
<212> PRT
<213> Homo sapiens

<400> 138

Met Trp Trp Pro Met Leu Trp Ala Phe Pro Val Leu Leu Cys Leu Cys
1 5 10 15

Ser Ser Gln Ala Leu Gly Gln Glu Ser Gly Ala Cys Pro Asp Val Lys
20 25 30

Ile Val Gly Leu Gly Ala Gln Asp Lys Val Ala Val Ile Gln Ser Cys
35 40 45

Pro Ser Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro
50 55 60

Ala Gly Arg Gly Glu Arg Gly Leu Gln Gly Ser Pro Gly Lys Met Gly
65 70 75 80

Pro Pro Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
85 90 95

Lys Gly Glu Lys Gly Glu Arg Gly Thr Ala Ser Pro Leu Gly Gln Lys
100 105 110

Glu Leu Gly Asp Ala Leu Cys Arg Arg Gly Pro Arg Ser Cys Lys Asp
115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu
130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asn Phe
165 170 175

Tyr Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Arg Glu Phe Gln Gly Gln Thr Ser
210 215 220

Phe Ala Lys Tyr Ser Ser Phe Gln Val Ser Gly Glu Gln Glu Lys Tyr
225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
245 250 255

Thr Lys His Asn Asn Met Ala Phe Ser Thr His Asp Gln Asp Asn Asp
260 265 270

Thr Asn Gly Gly Lys Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp
275 280 285

Tyr His Asp Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Pro Gly
290 295 300

Ser His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Leu Ser Gly Arg Gly
305 310 315 320

His Arg Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330 335

<210> 139
<211> 313
<212> PRT
<213> Homo sapiens

<400> 139

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile

35					40					45					
Leu	Arg	Gly	Cys	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Asp	Lys	Gly	Glu
50					55					60					
Ala	Gly	Thr	Asn	Gly	Lys	Arg	Gly	Glu	Arg	Gly	Pro	Pro	Gly	Pro	Pro
65					70					75					80
Gly	Lys	Ala	Gly	Pro	Pro	Gly	Pro	Asn	Gly	Ala	Pro	Gly	Glu	Pro	Gln
				85					90					95	
Pro	Cys	Leu	Thr	Gly	Pro	Arg	Thr	Cys	Lys	Asp	Leu	Leu	Asp	Arg	Gly
			100					105					110		
His	Phe	Leu	Ser	Gly	Trp	His	Thr	Ile	Tyr	Leu	Pro	Asp	Cys	Arg	Pro
		115					120					125			
Leu	Thr	Val	Leu	Cys	Asp	Met	Asp	Thr	Asp	Gly	Gly	Gly	Trp	Thr	Val
	130					135					140				
Phe	Gln	Arg	Arg	Val	Asp	Gly	Ser	Val	Asp	Phe	Tyr	Arg	Asp	Trp	Ala
145						150					155				160
Thr	Tyr	Lys	Gln	Gly	Phe	Gly	Ser	Arg	Leu	Gly	Glu	Phe	Trp	Leu	Gly
				165					170					175	
Asn	Asp	Asn	Ile	His	Ala	Leu	Thr	Ala	Gln	Gly	Thr	Ser	Glu	Leu	Arg
			180					185					190		
Val	Asp	Leu	Val	Asp	Phe	Glu	Asp	Asn	Tyr	Gln	Phe	Ala	Lys	Tyr	Arg
		195					200					205			
Ser	Phe	Lys	Val	Ala	Asp	Glu	Ala	Glu	Lys	Tyr	Asn	Leu	Val	Leu	Gly
	210					215					220				
Ala	Phe	Val	Glu	Gly	Ser	Ala	Gly	Asp	Ser	Leu	Thr	Phe	His	Asn	Asn
225						230					235				240
Gln	Ser	Phe	Ser	Thr	Lys	Asp	Gln	Asp	Asn	Asp	Leu	Asn	Thr	Gly	Asn
				245					250					255	
Cys	Ala	Val	Met	Phe	Gln	Gly	Ala	Trp	Trp	Tyr	Lys	Asn	Cys	His	Val
			260					265					270		

Ser Asn Leu Asn Gly Arg Tyr Leu Arg Gly Thr His Gly Ser Phe Ala
275 280 285

Asn Gly Ile Asn Trp Lys Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys
290 295 300

Val Ser Glu Met Lys Val Arg Pro Ala
305 310

<210> 140
<211> 306
<212> PRT
<213> Homo sapiens

<400> 140

Leu Gly Ser Ala Ala Leu Phe Val Leu Thr Leu Thr Val His Ala Ala
1 5 10 15

Gly Thr Cys Pro Glu Leu Lys Val Leu Asp Leu Glu Gly Tyr Lys Gln
20 25 30

Leu Thr Ile Leu Gln Gly Cys Pro Gly Leu Pro Gly Ala Ala Gly Pro
35 40 45

Lys Gly Glu Ala Gly Ala Lys Gly Asp Arg Gly Glu Ser Gly Leu Pro
50 55 60

Gly Ile Pro Gly Lys Glu Gly Pro Thr Gly Pro Lys Gly Asn Gln Gly
65 70 75 80

Glu Lys Gly Ile Arg Gly Glu Lys Gly Asp Ser Gly Pro Ser Gln Ser
85 90 95

Cys Ala Thr Gly Pro Arg Thr Cys Lys Glu Leu Leu Thr Gln Gly His
100 105 110

Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu Pro Asp Cys Arg Pro Met
115 120 125

Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe
130 135 140

Gln Arg Arg Leu Asp Gly Ser Val Asp Phe Phe Arg Asp Trp Thr Ser
145 150 155 160

Tyr Lys Arg Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn
165 170 175

Asp Asn Ile His Ala Leu Thr Thr Gln Gly Thr Ser Glu Leu Arg Val
180 185 190

Asp Leu Ser Asp Phe Glu Gly Lys His Asp Phe Ala Lys Tyr Ser Ser
195 200 205

Phe Gln Ile Gln Gly Glu Ala Glu Lys Tyr Lys Leu Ile Leu Gly Asn
210 215 220

Phe Leu Gly Gly Gly Ala Gly Asp Ser Leu Thr Pro His Asn Asn Arg
225 230 235 240

Leu Phe Ser Thr Lys Asp Gln Asp Asn Asp Gly Ser Thr Ser Ser Cys
245 250 255

Ala Met Gly Tyr His Gly Ala Trp Trp Tyr Ser Gln Cys His Thr Ser
260 265 270

Asn Leu Asn Gly Leu Tyr Leu Arg Gly Pro His Lys Ser Tyr Ala Asn
275 280 285

Gly Val Asn Trp Lys Ser Trp Arg Gly Tyr Asn Tyr Ser Cys Lys Val
290 295 300

Ser Glu
305

<210> 141
<211> 334
<212> PRT
<213> Homo sapiens

<400> 141

Met Gln Trp Pro Thr Leu Trp Ala Phe Ser Gly Leu Leu Cys Leu Cys
1 5 10 15

Pro Ser Gln Ala Leu Gly Gln Glu Arg Gly Ala Cys Pro Asp Val Lys
20 25 30

Val Val Gly Leu Gly Ala Gln Asp Lys Val Val Val Ile Gln Ser Cys

35

40

45

Pro Gly Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro
50 55 60

Ala Gly Arg Gly Glu Arg Gly Phe Gln Gly Ser Pro Gly Lys Met Gly
65 70 75 80

Pro Ala Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
85 90 95

Lys Gly Glu Lys Gly Asp Thr Gly Ala Ala Pro Ser Leu Gly Glu Lys
100 105 110

Glu Leu Gly Asp Thr Leu Cys Gln Arg Gly Pro Arg Ser Cys Lys Asp
115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile His Leu
130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asp Phe
165 170 175

Phe Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Gln Asp Phe Gln Gly Lys Gly Ser
210 215 220

Tyr Ala Lys Tyr Ser Ser Phe Gln Val Ser Glu Glu Gln Glu Lys Tyr
225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
245 250 255

Thr Lys His Asn Asn Met Ser Phe Thr Thr His Asp Gln Asp Asn Asp
260 265 270

Ala Asn Ser Met Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp Tyr
275 280 285

His Asn Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Ser Gly Ser
290 295 300

His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Gly Thr Gly Gln Gly His
305 310 315 320

His Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330

<210> 142
<211> 319
<212> PRT
<213> Homo sapiens

<400> 142

Met Val Leu Gly Ser Ala Ala Leu Phe Val Leu Ser Leu Cys Val Thr
1 5 10 15

Glu Leu Thr Leu His Ala Ala Asp Thr Cys Pro Glu Val Lys Val Leu
20 25 30

Asp Leu Glu Gly Ser Asn Lys Leu Thr Ile Leu Gln Gly Cys Pro Gly
35 40 45

Leu Pro Gly Ala Leu Gly Pro Lys Gly Glu Ala Gly Ala Lys Gly Asp
50 55 60

Arg Gly Glu Ser Gly Leu Pro Gly His Pro Gly Lys Ala Gly Pro Thr
65 70 75 80

Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Val Arg Gly Glu Lys Gly
85 90 95

Asp Thr Gly Pro Ser Gln Ser Cys Ala Thr Gly Pro Arg Thr Cys Lys
100 105 110

Glu Leu Leu Thr Arg Gly Tyr Phe Leu Thr Gly Trp Tyr Thr Ile Tyr
115 120 125

Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp
130 135 140

Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Ile Asp Gly Thr Val Asp
145 150 155 160

Phe Phe Arg Asp Trp Thr Ser Tyr Lys Gln Gly Phe Gly Ser Gln Leu
165 170 175

Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala Leu Thr Thr Gln
180 185 190

Gly Thr Asn Glu Leu Arg Val Asp Leu Ala Asp Phe Asp Gly Asn His
195 200 205

Asp Phe Ala Lys Tyr Ser Ser Phe Gln Ile Gln Gly Glu Ala Glu Lys
210 215 220

Tyr Lys Leu Ile Leu Gly Asn Phe Leu Gly Gly Gly Ala Gly Asp Ser
225 230 235 240

Leu Thr Ser Gln Asn Asn Met Leu Phe Ser Thr Lys Asp Gln Asp Asn
245 250 255

Asp Gln Gly Ser Ser Asn Cys Ala Val Arg Tyr His Gly Ala Trp Trp
260 265 270

Tyr Ser Asp Cys His Thr Ser Asn Leu Asn Gly Leu Tyr Leu Arg Gly
275 280 285

Leu His Lys Ser Tyr Ala Asn Gly Val Asn Trp Lys Ser Trp Lys Gly
290 295 300

Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Val Arg Leu Ile
305 310 315

<210> 143
<211> 334
<212> PRT
<213> Mus musculus

<400> 143

Met Gln Trp Pro Thr Leu Trp Ala Phe Ser Gly Leu Leu Cys Leu Cys
1 5 10 15

Pro Ser Gln Ala Leu Gly Gln Glu Arg Gly Ala Cys Pro Asp Val Lys

20

25

30

Val Val Gly Leu Gly Ala Gln Asp Lys Val Val Val Ile Gln Ser Cys
 35 40 45

Pro Gly Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro
 50 55 60

Ala Gly Arg Gly Glu Arg Gly Phe Gln Gly Ser Pro Gly Lys Met Gly
 65 70 75 80

Pro Ala Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
 85 90 95

Lys Gly Glu Lys Gly Asp Thr Gly Ala Ala Pro Ser Leu Gly Glu Lys
 100 105 110

Glu Leu Gly Asp Thr Leu Cys Gln Arg Gly Pro Arg Ser Cys Lys Asp
 115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile His Leu
 130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
 145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asp Phe
 165 170 175

Phe Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
 180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
 195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Gln Asp Phe Gln Gly Lys Gly Ser
 210 215 220

Tyr Ala Lys Tyr Ser Ser Phe Gln Val Ser Glu Glu Gln Glu Lys Tyr
 225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
 245 250 255

Thr Lys His Asn Asn Met Ser Phe Thr Thr His Asp Gln Asp Asn Asp
260 265 270

Ala Asn Ser Met Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp Tyr
275 280 285

His Asn Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Ser Gly Ser
290 295 300

His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Gly Thr Gly Gln Gly His
305 310 315 320

His Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330

<210> 144
<211> 326
<212> PRT
<213> Homo sapiens

<400> 144

Met Glu Leu Ser Gly Ala Thr Met Ala Arg Gly Leu Ala Val Leu Leu
1 5 10 15

Val Leu Phe Leu His Ile Lys Asn Leu Pro Ala Gln Ala Ala Asp Thr
20 25 30

Cys Pro Glu Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Thr
35 40 45

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala
65 70 75 80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Asn Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys
165 170 175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Ser Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 145
<211> 323
<212> PRT
<213> Pig

<400> 145

Met Asp Thr Arg Gly Val Ala Ala Ala Met Arg Pro Leu Val Leu Leu
1 5 10 15

Val Ala Phe Leu Cys Thr Ala Ala Pro Ala Leu Asp Thr Cys Pro Glu
20 25 30

Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Ser Ile Leu Arg
35 40 45

Gly Cys Pro Gly Leu Pro Gly Ala Ala Gly Pro Lys Gly Glu Ala Gly
50 55 60

Ala Ser Gly Pro Lys Gly Gly Gln Gly Pro Pro Gly Ala Pro Gly Glu
65 70 75 80

Pro Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Glu Pro
85 90 95

Gly Pro Lys Gly Glu Ser Trp Glu Thr Glu Gln Cys Leu Thr Gly Pro
100 105 110

Arg Thr Cys Lys Glu Leu Leu Thr Arg Gly His Ile Leu Ser Gly Trp
115 120 125

His Thr Ile Tyr Leu Pro Asp Cys Gln Pro Leu Thr Val Leu Cys Asp
130 135 140

Met Asp Thr Asp Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Ser Asp
145 150 155 160

Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys Arg Gly Phe
165 170 175

Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp His Ile His Ala
180 185 190

Leu Thr Ala Gln Gly Thr Asn Glu Leu Arg Val Asp Leu Val Asp Phe
195 200 205

Glu Gly Asn His Gln Phe Ala Lys Tyr Arg Ser Phe Gln Val Ala Asp
210 215 220

Glu Ala Glu Lys Tyr Met Leu Val Leu Gly Ala Phe Val Glu Gly Asn
225 230 235 240

Ala Gly Asp Ser Leu Thr Ser His Asn Asn Ser Leu Phe Thr Thr Lys
245 250 255

Asp Gln Asp Asn Asp Gln Tyr Ala Ser Asn Cys Ala Val Leu Tyr Gln
260 265 270

Gly Ala Trp Trp Tyr Asn Ser Cys His Val Ser Asn Leu Asn Gly Arg
275 280 285

Tyr Leu Gly Gly Ser His Gly Ser Phe Ala Asn Gly Val Asn Trp Ser
290 295 300

Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Phe
305 310 315 320

Arg Ala Thr

<210> 146
<211> 319
<212> PRT
<213> Homo sapiens

<400> 146

Met Ala Arg Gly Leu Ala Val Leu Leu Val Leu Phe Leu His Ile Lys
1 5 10 15

Asn Leu Pro Ala Gln Ala Ala Asp Thr Cys Pro Glu Val Lys Val Val
20 25 30

Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile Leu Arg Gly Cys Pro Gly
35 40 45

Leu Pro Gly Ala Pro Gly Pro Lys Gly Glu Ala Gly Val Ile Gly Glu
50 55 60

Arg Gly Glu Arg Gly Leu Pro Gly Ala Pro Gly Lys Ala Gly Pro Val
65 70 75 80

Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Met Arg Gly Glu Lys Gly
85 90 95

Asp Ala Gly Gln Ser Gln Ser Cys Ala Thr Gly Pro Arg Asn Cys Lys
100 105 110

Asp Leu Leu Asp Arg Gly Tyr Phe Leu Ser Gly Trp His Thr Ile Tyr
115 120 125

Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp
130 135 140

Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Met Asp Gly Ser Val Asp
145 150 155 160

Phe Tyr Arg Asp Trp Ala Ala Tyr Lys Gln Gly Phe Gly Ser Gln Leu
165 170 175

Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala Leu Thr Ala Gln
180 185 190

Gly Ser Ser Glu Leu Arg Val Asp Leu Val Asp Phe Glu Gly Asn His
195 200 205

Gln Phe Ala Lys Tyr Lys Ser Phe Lys Val Ala Asp Glu Ala Glu Lys
210 215 220

Tyr Lys Leu Val Leu Gly Ala Phe Val Gly Gly Ser Ala Gly Asn Ser
225 230 235 240

Leu Thr Gly His Asn Asn Asn Phe Phe Ser Thr Lys Asp Gln Asp Asn
245 250 255

Asp Val Ser Ser Ser Asn Cys Ala Glu Lys Phe Gln Gly Ala Trp Trp
260 265 270

Tyr Ala Asp Cys His Ala Ser Asn Leu Asn Gly Leu Tyr Leu Met Gly
275 280 285

Pro His Glu Ser Tyr Ala Asn Gly Ile Asn Trp Ser Ala Ala Lys Gly
290 295 300

Tyr Lys Tyr Ser Tyr Lys Val Ser Glu Met Lys Val Arg Pro Ala
305 310 315

<210> 147
<211> 187
<212> PRT
<213> Homo sapiens

<400> 147

Met Lys Ser Cys Phe Phe Val Leu Phe Leu Trp Thr Leu Leu Phe Glu
1 5 10 15

Val Gly Gln Ser Ser Pro His Thr Cys Pro Ser Gly Ser Pro Asn Gly
20 25 30

Ile His Gln Leu Met Leu Pro Glu Glu Glu Pro Phe Gln Val Thr Gln
35 40 45

Cys Lys Thr Thr Ala Arg Asp Trp Ile Val Ile Gln Arg Arg Leu Asp
50 55 60

Gly Ser Val Asn Phe Asn Gln Ser Trp Phe Ser Tyr Lys Asp Gly Phe
65 70 75 80

Gly Asp Pro Asn Gly Glu Phe Phe Ile Gly Leu Gln Lys Leu Tyr Leu
85 90 95

Met Thr Arg Glu Gln Pro His Glu Leu Phe Ile Gln Leu Lys His Gly
100 105 110

Pro Gly Ala Thr Val Tyr Ala His Phe Asp Asp Phe Gln Val Asp Ser
115 120 125

Glu Thr Glu Leu Tyr Lys Leu Glu Arg Val Gly Lys Tyr Ser Gly Thr
130 135 140

Ala Gly Asp Ser Leu Arg Tyr His Ile Asn Lys Arg Phe Ser Thr Phe
145 150 155 160

Asp Arg Asp Asn Asp Glu Ser Ser Lys Asn Cys Ala Ala Glu His Gly
165 170 175

Gly Gly Trp Trp Phe His Ser Cys Leu Ser Arg
180 185